

Lib. Sci
Z
733
17623
1905/06

UNIVERSITY BULLETIN

NEW SERIES, VOL. VIII, NO. 10

UNIVERSITY OF MICHIGAN



ANNUAL REPORT

OF THE

LIBRARIAN

FOR

1905-1906



Ann Arbor, Michigan

PUBLISHED BY THE UNIVERSITY

1907



PHOTO. BY ALEXANDER

RAYMOND CAZALLIS DAVIS

LIBRARIAN, 1877-1905; LIBRARIAN EMERITUS, SINCE OCTOBER 1, 1965

UNIVERSITY OF MICHIGAN

ANNUAL REPORT
OF THE
LIBRARIAN

FOR

1905-1906



Ann Arbor, Michigan
PUBLISHED BY THE UNIVERSITY
1907

Library Committee of the Board of Regents.

DR. WALTER H. SAWYER, Chairman
JUDGE LOYAL E. KNAPPEN

Library Committee of the Literary Faculty

PROF. ISAAC N. DEMMON PROF. JOSEPH H. DRAKE
PROF. FREDERICK C. NEWCOMBE PROF. FRED M. TAYLOR
 PROF. ALEXANDER ZIWET

The President and Librarian, *ex-officio* members.

Librarian Emeritus

RAYMOND CAZALLIS DAVIS, A.M.

Librarian of the University

THEODORE WESLEY KOCH, A.M.

General Library Staff

FREDERICK P. JORDAN, A.B., in charge of catalogue.

ESTHER A. SMITH, A.B., reviser.

GRACE LANE, cataloguer and general assistant.

MABEL C. TRUE, cataloguer.

JESSIE P. BOSWELL, A.B., cataloguer.

HELEN M. THOMAS, cataloguer.

BYRON A. FINNEY, A.B., in charge of circulation.

FREDERICKA B. GILLETTE, A.B., first assistant in reading room.

FRANC PATTISON, charging clerk.

MARGUERITE PATTISON, in charge of periodicals.

FRANCIS L. D. GOODRICH, A.B., in charge of orders and accessions.

AMANDA BELSER, first assistant.

E. MAY GOODRICH, A.B., second assistant.

ELLA F. TOBIAS, B.L., in charge of Engineering Library.

ETHEL M. WIGHT, Librarian's secretary.

Law Library

VICTOR H. LANE, C.E., LL.B., Librarian.

GERTRUDE E. WOODARD, Assistant Librarian.

Library Committee: PROFESSORS HENRY M. BATES, JAMES H. BREWSTER.

The Law Librarian and the Dean of the Law Department, *ex-officio* members.

Medical Library Committee

DR. GEORGE DOCK, Chairman.

DR. WARREN P. LOMBARD

Engineering Library Committee

PROF. ALEXANDER ZIWET, Chairman.

PROF. HERBERT C. SADLER

PROF. GARDNER S. WILLIAMS

The Dean and Associate Dean of the Engineering Department, *ex-officio* members.

REPORT OF THE LIBRARIAN

1905-06

To the Honorable Board of Regents,
University of Michigan :

Gentlemen—I have the honor to submit herewith my first annual report as Librarian of the University. In addition to the work of the past year, it covers some of the work done under my direction as assistant librarian during the year 1904-05, which Mr. Davis thought proper to leave to me “the duty and the privilege of reporting to you.”

You will recall that when in April, 1904, I was asked to come to Ann Arbor, I was connected with the Library of Congress, and that it was impossible for me to take up my new work at once. For several months I continued to reside in Washington, but gave half of my time to arrangements looking towards the acquisition of a depository catalogue of the Library of Congress cards, the purchase of a set of the John Crerar Library cards and the card publications of the American Library Association, the purchase of catalogue cases, the designing of a book-plate for the University Library, etc. I also made a tour of the eastern libraries with a view to studying certain questions which were sure to call for answers at Ann Arbor. During the midsummer I spent a fortnight here and arranged for the alphabetization and installation of the Library of Congress depository catalogue, which had arrived from Washington. I also made a provisional rearrangement of tables and cases in the reading room, which allowed us to place a thousand or more reference books within the immediate reach of students.

Among my first recommendations to you was the building of shelves around the semi-circular wall of the reading room, to contain accommodations for about 5,000 volumes over and above what were already in place. This was duly granted and the work was done during the Christmas vacation. The shelving was designed to conform to the height of five cabinets which had been built in the summer of 1902 to cover the new ventilating shafts. The tops of these cabinets were used as pedestals to hold five large busts of Bancroft, Agassiz, Longfellow, Scott and Beethoven, presented by Regent White. On both sides of two of the cabinets, dictionary rests were constructed. This served to give the ventilators free play, and also to break up the monotony of 150 feet of unbroken shelving. An academic touch was added by the use of shields, alternating with escutcheons, at the top of every other standard of the casing, and bearing the seals of twenty-two American and European colleges and universities. Above these were centered portraits of former presidents and professors of the University, together with some portraits of well known scholars and statesmen transferred from the overcrowded Art Gallery.

Establishment of the Reference Library.

One of the first problems to which my attention was called on taking up the work here, was the congestion of students at the delivery desk immediately after the hourly change of classes. This was caused by the students coming to the library after a lecture and rushing to the desk with call slip for books to which their professors had just referred them. The solution of the difficulty was the natural one of giving the students free access to the majority of these books by placing the volumes on open shelves. The new cases built around the room enabled us to do this during the months of January and February, 1905. Many of these books of required collateral reading had been furnished by the students themselves, each member of a class paying twenty-five cents toward the purchase of extra copies for the library in order to supply the demand.¹ These volumes,

¹ This practice was abolished two years ago.

together with strictly reference books and certain standard works, formed the nucleus of the reference library. The following is quoted from a circular letter sent out under date of January 7, 1905:

"All members of the faculty are cordially invited to offer suggestions and recommendations as to what books they would like to have placed on these shelves, though the limitations of the available room should not be forgotten.

"Books can be placed on the reference shelves temporarily, either for a semester or for such time as the instructor in charge may care to have special attention directed to them. In selecting books for the reference shelves, it should be borne in mind that books even temporarily charged to this department are not to be taken from the library while so charged. This may in some cases render advisable the purchase of a second copy or of another edition. In such cases attention should be called to the need.

"Departments having special libraries in other buildings will naturally not need as large a representation on the reference shelves as those not thus specially provided for, but, inasmuch as some of these departmental collections are not open in the evening it might be well to have a second copy of some of the standard works in these special fields shelved in the reading room. Such books would frequently prove useful to the general student not having access to the special departmental collection."

The reference library now numbers over 6,000 volumes, including the collection of indexes grouped on shelves near the card catalogue and the delivery desk. A separate card catalogue, duplicating the entries in the public catalogue, was made for the whole reference library, and for a time was kept in a case in the center of the reading room. It was found, however, that the students made little or no use of it, and that they always went to the main catalogue. Consequently the case containing this special reference catalogue was moved to the east end of the delivery desk, where, in conjunction with the shelf list of this collection, it has been found very helpful by the desk attendants in answering questions and locating books.

Despite the fact that some of the books placed on the reference shelves have disappeared (some only temporarily, just before an examination), there is no doubt as to the success of the innovation. The books which have shown the

greatest tendency to disappear have been those in the "class libraries,"—the books of required reading bought by the students and placed in the library for the general use of the class. It is possible that apart from the great demand for these books, a partial explanation for their disappearance may be found in a feeling of ownership on the part of the students who contributed toward their purchase. Be that as it may, the few books most in demand at any particular season are now temporarily withdrawn from the open shelves and placed behind the desk, where they are issued on reading room call slips.

The establishment of the reference library was most cordially welcomed by the faculty. Several professors claim to have found a noticeable improvement in the grade of work done by their students since they were granted freer access to books. Certainly the change in methods of instruction during the last decade or two rendered necessary some corresponding change in the administration of the library. Although written before the establishment of our reference library, and before the extension to students of the privilege of borrowing books, the following account of the changes in educational methods and the relation of students to the library is still applicable. It is an extract from the late Professor Hinsdale's recently published *History of the University of Michigan*:

"Formerly the great reliance of the student was his text-books, not the library, and when he resorted to the library it was rather for the purpose of general culture than for the purpose of studying specific subjects. His professors assigned him definite lessons in selected books—so many pages or paragraphs—which he was required to learn and to recite; and beyond this little was either required or expected. But no good college teacher, unless his work is largely formal and of an elementary sort, is now content to teach in that way. He has not indeed laid text-books aside, but he now uses them, with the qualification noted, as guides to the country that he wishes his students to explore rather than as a full description of that country. This means an enhanced use of the library by the student—its use for the ends of specific instruction. There can be no question that the change has been very beneficial upon the whole. It has made study more interesting and inspiring to the real student, and given greater breadth to his scholarship. It is possible, indeed,

highly probable, perhaps, that the text-book and the library have not yet been finally adjusted one to the other. But whatever may be the answer to this question, teaching at the University of Michigan has conformed to the general movement throughout the country. Evidence of it is seen in the growth of the library, and particularly in the extension of its use. Perhaps the best general test that exists of the interest of students in their work and their application to it is daily observation of those who throng the reading room to engage in general reading or to follow up the clues that their teachers have given them relative to their class-room work. Here may be seen in active operation much more of the power that moves the Department of Literature, Science and the Arts than is concentrated at any other spot on the Campus."

Beautification of the Reading Room.

During the midwinter of 1904-05 you authorized the purchase of plaster casts of Donatello's cantoria frieze and of eight of the Luca della Robbia panels from the organ loft in the Cathedral of Florence. By piecing out the Donatello frieze at either end with one panel by Della Robbia and two plain slabs, a harmonious composition was formed of sufficient length to hide from view the unattractive iron railing which fronted the balcony over the delivery desk. The six brackets supporting this balcony divide the wall behind the desk into seven sections, the middle one occupied by a clock and the end ones (over the doors leading to the stack) being narrower than the other five. In the six unoccupied sections, bracket mouldings were built to support the Della Robbia panels, which were then grouped with a view to the composition as a whole and in relation to the frieze overhead. Thus the two series, originally designed for opposite ends of the Duomo by artists working independently, have been brought into what has been conceded to be a harmonious unit, even though it perforce disregards what is now known to have been the order of the Della Robbia panels. The balcony in our reading room, although slightly higher than the organ loft for which these reliefs were originally designed, serves admirably for their display and helps to give something of the effect of the original cantoria as planned by those Renaissance masters.

As a further experiment in relieving the walls of their bareness, I secured ivory-tinted casts of three consecutive

sections of the Parthenon frieze. These were placed on the west wall of the east tower, resting on a moulding which runs around the entire reading room. The effect was so generally liked that I was authorized to secure enough of the frieze to cover the opposite wall, as well as to extend it around the north side of these tower walls. After considerable measuring and study, a series of consecutive sections to fit in these places was worked out and their correct relative position was preserved.

The removal of chairs from the outer circle of tables in the reading room to leave a sufficiently wide passage-way for easy access to the reference shelves built against the wall, left 270 seats at the tables rather closely crowded. The number of women using the library has nearly equalled that of the men, and there has been less segregation of the sexes since the establishment of the reference shelves. From an administrative point of view, this is particularly gratifying, as it is desirable to have these books used at tables near the shelves on which they belong. Heretofore the men invariably sat on the west side and the women on the east side of the reading room, and any infraction of this unwritten student rule by a new student was sure to call forth unmistakable signs of disapproval on the part of the men. Groups of men, however, can now be seen any day over on the east side of the room at work at the tables near the shelves containing the selected books on history.

"Probably owing in part to the influence of more tasteful surroundings, as well as to an improved student sentiment," Mr. Finney reports, "the order in the reading rooms has been better and the number of mutilations of books and periodicals less than in previous years." This bears out my prediction of two years ago when I first argued for the beautification of the reading room and the freer access for students to books. As I said to a member of your Board at that time: No body of people respond more quickly than do students to considerate treatment. Let them see that you are trying to make their work-room more attractive and their work more productive by shortening the distance between them and the books they need, and you have won them to your side.



READING ROOM OF THE UNIVERSITY LIBRARY IN 1905-1906

PHOTO. BY LYNDON

As all the world knows, says Burton in his "Book-hunter," men assimilate to the conditions by which they are surrounded. "So, in a noble library," says he, "the visitor is enchained to reverence and courtesy by the genius of the place. You cannot toss about its treasures as you would your own rough calfs and obdurate hogskins; as soon would you be tempted to pull out your meerschaum and punk-box in a cathedral."

Opening of the Periodical Room.

The east room on the ground floor has at different times served for a lecture room, for the storage of plaster casts and for bound volumes of newspapers. Of recent years the current files of periodicals received by the General Library were kept there in pigeon holes running around three sides of the room, and presumably from a sort of *lucus a non lucendo* reasoning the place was called the Faculty Reading Room. The north end had been blocked off by a case for bound volumes of newspapers and the space behind this used for making up the material for binding. In January, 1905, this end of the room was cleared of all but the pigeon holes, and the arrangement of the periodicals changed from an alphabetical to a subject grouping. Beginning at the left of the entrance from the hallway, the periodicals were grouped according to the classification in vogue in the stacks. Printed labels in sheet brass holders replaced the manuscript tabs on the different pigeon holes. Several additional tables were secured from other parts of the campus and chairs which could be spared from the outer row of desks in the reading room (owing to the erection of book shelves facing these desks) were put into the new periodical room. This gave a seating capacity of thirty. Permission to open the room to the students was granted at the January meeting of your Board. The table farthest removed from the door was reserved for members of the faculty and this has been found to answer all needs. Later on a newspaper rack was installed, and the daily papers which had hitherto been kept in the librarian's office and filed in the stack were then placed where the public could have free

access to them.² A desk was provided in the room for the assistant who had charge of the current files of periodicals and she was given charge of the room. Her presence there was considered as a safeguard against vandalism, and her desk has been a bureau of information for readers in regard to periodicals in general.

We have recently added a display rack for the current numbers of the popular magazines, each of which is kept in a binder and its proper place in the rack indicated by a copy of the cover placed under plate-glass. The indexes to the popular periodicals (Poole's, Reader's Guide, etc.) have been transferred from a table in the reading room to the periodical room because of the space in the reading room being needed for other work.

Seminary Rooms.

The seminary rooms, to which are admitted all graduate students, and such upper classmen as are doing advanced work in language and literature, in history or in economics, have been overcrowded for years. While the establishment of the reference library has reduced somewhat the average attendance in the seminary rooms by undergraduate students who find on the shelves in the reading room many of the books needed by them, yet the number of applications for the assignment of seats in the seminary rooms continues to grow.

Additional shelving was erected in the west seminary room, thus relieving the crowded condition of the other cases. The so-called "session room" in the east seminary, consisting of a corner which had been boarded off from the rest of the room, had long since been regarded as a failure

² The papers kept on file are the *Ann Arbor Argus*,* *News*,* and *Times*,* *Detroit Free Press*,* *Journal** and *News*,* *Kalamazoo Telegraph*,* *Lansing State Republican*,* *Chicago Post*, *Record-Herald* and *Tribune*, *Boston Transcript*,* *Brooklyn Eagle*,* *New York Herald*, and *Evening Post* (semi-weekly edition; gift of Prof. Ziwet), and *Philadelphia Ledger*.* For German readers there is the *New Yorker Staats-Zeitung*,* and for the French the *Journal des débats* (gift of the Cercle Français). Those marked by an asterisk are the gift of the publishers.

both from the point of view of light and ventilation. When it was decided to paint and renovate the entire suite of seminary rooms, authorization to tear down this boarding was secured. Latterly a round table was placed in the room to the west overlooking the reading room and the seminars in history and economics are now held in this room. This is in fact the only room in the building in which a real seminar can be held. The other so-called "seminary rooms" are nothing but work rooms for the advanced students. The lighting in both the east and west rooms overlooking the reading room has been changed so as to better suit the needs of the occupants. Incidentally the wires have been hid from view and the appearance of the room much improved thereby.

The abolition of the two positions of seminary attendants, recommended by me in June, 1905, in order to use the money thus spent for the improvement of the service at the delivery desk, has worked to advantage, and no complaints have been heard either from professors or students. We have, however, taken away the keys to the desks in the seminaries in order to prevent library books being locked up by students who wished to secure for themselves the sole and uninterrupted use of a book much in demand. The recording at the delivery desk of books wanted by seminary readers has centered the information as to books in use, and has worked well.

Renovation of the Delivery Desk.

The "return desk," which was established in the summer of 1902 by extending the central portion of the delivery desk ten feet beyond the two ends, was done away with during the Christmas recess of 1904-5 by removing the connecting cases and putting back the counter to its original place. At the same time a wire screen along the eastern end of the counter was dispensed with. The object of these changes was to prevent the congestion of students at one end of the counter. The top of the counter, which had been marred by hard usage and contained much unofficial chirographic history of undergraduates for twenty years back, was padded and covered with an imitation olive green leather. This deadened the sound of the books thrown on

the desk by students hurrying to their classes and also added greatly to the attractiveness of this part of the room.

Library bureau charging trays for both the reference and the circulating departments were added to the equipment of the delivery desk, and new swivel chairs of the right height for use at this desk were provided for the assistants. An oval-shaped reference desk, especially designed for a place where many people are constantly passing to and fro, was made for the use of Mr. Finney.

Delivery Desk Service.

At the meeting of the Board held June, 1905, I recommended the entire abolition of the two student positions in the seminary rooms and the partial abolition of student help at the desk in order to be able, with the same appropriation, to establish the position of charging clerk and to engage a trained assistant for the delivery desk, with two pages to help in finding the books called for and in replacing them on the shelves. Several of the best student assistants of the previous year were retained for the evening force.

This change has resulted in the greatest benefit to the reading room service. Even a good student attendant (and the library has had the fortune to have had some very good ones) works during the day time under the disadvantage of having his attention divided between his studies and his work at the desk. His time is broken into by numerous lectures and recitations, and frequently before a quiz or an examination his mind is so occupied with the coming ordeal that he is of little use at the desk. Questions difficult for an undergraduate attendant are now more apt to be put to the assistant in charge of the desk, who is not expected to leave her post to go for books, but to be on hand to answer calls for information and to do the work of a reference assistant.

The presence of women assistants behind the desk has had a beneficial effect on the attitude of the students toward the desk. It has made the women students feel more at home and more ready to ask for information about books and references. It has also reacted favorably on the character of the work done by the young men employed at the desk.

A sloping exhibit rack, with a capacity of nearly two

hundred volumes, has been placed in front of the loan desk. Here the new books are exhibited for a few weeks before going to the stacks. They are allowed to circulate freely both among the faculty and students, but the main value of the practice is the opportunity it gives the University public to examine at leisure the additions which are being made to the library from week to week. Parenthetically it might be added that it has also served to minimize the number of requests for the loan of new uncatalogued books. Those who are ever on the search for the latest work have already formed the habit of going to the new book rack and they make fewer raids on the catalogue room or the office in which the books are being accessioned. No doubt the presence of a charging clerk has also tended to minimize the number of uncatalogued books borrowed from the library.

Establishment of a Charging Desk.

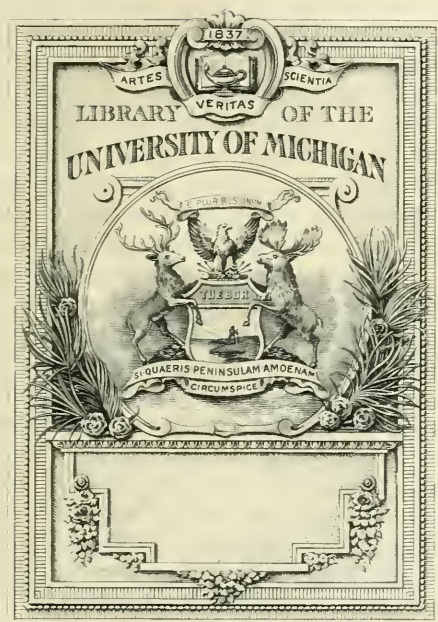
One result of the reorganization of the reading room force, authorized by you at your meeting in June, 1905, was the creation of a new position, that of charging clerk, whose chief duties are to see that all books taken from the library are represented by a card properly made out and signed by the borrower, and that books are promptly discharged upon their return to the library. This was found necessary in order to systematize the constantly increasing work of the loan desk even before the extension to students of the privilege of borrowing books. It seemed advisable to put the faculty circulation on a rational business basis before asking these privileges for undergraduates. As stated in a circular letter to the faculty at the time of the innovation: "Those who have not had occasion to look into the subject would be surprised to find what a variety of cards, useless for the purpose of records, has been hitherto left behind in good faith as adequate descriptions of the books borrowed. From some the author's name or the title of the book would be omitted, or the book would be entered under the name of the editor instead of the author. The possibility of confusion and doubt in the case of periodicals is endless. The cards were often nothing more than a slight clue as to what the borrower had taken out. All this has meant the daily expenditure of considerable time in

research between the card catalogue and the book-stack in order to verify conjectures as to what books were represented by these inadequate entries. The mere fact that during one period of three weeks forty-five books were returned to the library for which no cards had been left by their borrowers was of itself a sufficiently strong indication of the need of a charging clerk. There was no way of estimating how long these books were out of the library, how often they were sought for by desk attendants and others on account of their not being charged out, nor of the amount of criticism to which the library was subjected whenever any one of these books was asked for. No one feels kindly disposed towards a library when he asks for a book and is told that it cannot be found. We freely grant that the borrowers also had a grievance against the library when they checked up their accounts and found a book charged to them after they had duly returned it. We hope to see this remedied by the charging clerk. The question resolves itself into one of keeping accounts. The credit side must be kept as carefully as the debit."

For this new position tact and experience, as well as a personal acquaintance with the University public, were deemed essential. Miss Franc Pattison, who had rendered excellent service to the library in several minor positions, was the logical appointee, and much of the satisfaction felt by the faculty at the change of method in keeping the records is due to Miss Pattison's tactful method of handling this work.

Shortly after the charging clerk assumed the duties of her new position, it was seen that she could also take charge of student circulation if established. A memorial on the subject of the extension to students of the privilege of borrowing books for home use was therefore prepared and formed the subject for discussion at a meeting of the Library Committee. Having been favorably passed upon by the committee, it was submitted to the Board at its meeting in December, 1905, and the privilege was duly granted. At the next meeting a provisional set of rules regulating the circulation of books was submitted, and after some revision was adopted. (See Appendix to this report.)

The beginning of the second semester was thought to



be a good time for introducing the new rules, and preparations looking toward student circulation were accordingly made. A brief survey of the events leading up to this innovation may not be amiss.

Student Circulation.

In 1856 the privilege of borrowing books from the library of the University of Michigan was taken away from the students; in February, 1906 (a half-century later), it was restored to them. In the early history of the University of Michigan, as in other educational institutions, the library was open but a few hours per week. Consequently it was thought necessary for the students to have the privilege of taking books to their rooms. Students were comparatively few in number and the demand for books was not very heavy. With the increase in the number of students and the consequent larger demand on the resources of the library, the hours of opening were lengthened but the privileges of the undergraduates were curtailed.

The question of extending to students the privilege of borrowing books for use in their own rooms had come up several times within the last dozen years. In his report for 1896, President Angell had urged the Board to consider the feasibility of setting apart a certain number of books for student circulation: "Believing that such use of certain books will be more advantageous to the readers," said he, "I have long looked forward to the time when it would be practicable for us to permit it. I have always thought that when the number of volumes approached 100,000 we might safely give this larger liberty to students under certain restrictions. . . . The expense of the service at the desk may be a little increased. The risk of loss is perhaps somewhat enhanced. But after all proper weight is given to these facts, we have to remember that the library is the great central power in the instruction given in the University, and that the books are here not to be locked up and kept away from readers, but to be placed at their disposal with the utmost freedom compatible with safety and with the general and equal convenience of all students."

Plans formulated some eight years ago for a separate circulating library, with duplicates received from a recent

bequest and a purchase as a nucleus, never materialized. In my opinion the segregation of a certain number of volumes in a special room, to be designated as a circulating library, would only have been an unsatisfactory compromise. I doubt whether any such attempt to regulate the demand of the student body would work well in practice. No librarian, nor any library committee, can select 5,000 books from a university library of 200,000 volumes and say that these represent all that can be justly called collateral reading for university students. No one can foresee what directions the demand for wide reading will take in some university courses. The writing of a particular theme may call for the reading of a book which no one would think of placing in a circulating library limited to 5,000 volumes. The work may be very special in its nature, and might not be called for again in years. Yet if it were a volume of no great rarity, there is no more reason why the student should not have the privilege of borrowing it than any of the 5,000 fundamental works selected for the circulating library. Again, a student's reading may require the continuous perusal of volume after volume of serious matter, a grade of reading that cannot always be done to advantage in a large and noisy reading room where one is interrupted by the coming and going of throngs of students hurrying to and from lectures. For certain kinds of work the best reading room in the world is the private study.

When the question of student circulation was first discussed with some members of the faculty, they expressed doubts as to whether the extension to undergraduates of the privilege of borrowing books would not necessitate the purchase of duplicate copies of certain works. Even granting that it would require some duplication, this is not a valid argument against the practice. Why should not the University Library buy extra copies of books much in demand, just as the laboratories duplicate certain apparatus for the use of students? A university library has other functions than merely rolling up its sum total of volumes from year to year. If it is to take its proper place in the *educational* work of the institution it must not regard as wasted the money spent for an occasional duplicate of a work needed for the reference shelves or for circulation. It

must consider the needs of the teacher and of the undergraduate as well as the claims of the original investigator and advanced student.³

Thus far we have not bought second copies of any books to supply the demand at the loan desk. Duplicates in history and English literature are perhaps the most needed, but for some years past the head of the English department has had a special appropriation from the Board with which to purchase extra copies of the authors studied in the class room, and the students in history had their "class libraries." Members of the faculty wishing to have special books, likely to be much in demand by their students, temporarily withdrawn from circulation, are expected to notify the reading room assistants, who then reserve such books behind the delivery desk and issue them only for use in the reading room. Failure to give such notification before referring the classes to the books is sure to result in considerable inconvenience and confusion.

One Semester's Experience.

The statistics of the circulation department show that 1,046 students availed themselves of the privilege, and of the 4,636 books taken out for home use from February 12th

³ "Our university libraries ought, it seems to me, to adopt a principle similar to that of the circulating libraries: the number of copies ought to depend upon the demand. If these libraries can purchase ten or twenty copies of new books for which there is a great demand and afterwards sell the surplus at second-hand when the demand decreases, I do not see why the university libraries cannot do the same thing. They ought to act on the theory that every unfilled request is a loss in intellectual power to the nation. At the very least, the person making the request loses time, perhaps makes two or three fruitless trips to the library, and meanwhile is delayed, much to his disgust, in what may be an urgent piece of work. Or he loses the lively interest which he may happen to have at the time, and the disappointment caused by his futile efforts makes him give up more easily in future. Or is it perhaps to be feared that the student's inclination to buy books will be still further weakened by increasing his loan-privileges too much? I am almost tempted to maintain the opposite; there is, according to my experience, no more effective motive to purchase a book than to have learned its worth by previous use."—Friedrich Paulsen, *The German Universities and University Study*, p. 220-221.

to June 21st (exclusive of the over-night circulation) fifty per cent belonged to English literature. The figures show the following authors to have been the most frequently borrowed: Shakespeare, Hardy, Stevenson, Dickens, Kipling, George Eliot, Jane Austen, Hawthorne, and Thackeray. Of the remaining fifty per cent the circulation was divided as follows:

Philosophy and religion.....	53½%
Sociology and economics.....	5 %
Education	2 %
Science	4 %
Medicine	4 %
Fine arts and music.....	1 %
German literature	5 %
Romance languages	8½%
Latin and Greek.....	3 %
History	12 %
	<hr/>
	50 %

These figures are not to be taken as an indication of the relative amount of reading done in the different branches. In some departments of study the reference use of books is much greater than in others; of this use the above figures have nothing to say. Nor do they take cognizance of the reading done in the seminaries and in the departmental libraries.

In the one semester during which we have been loaning books to students we have found that the extension to undergraduates of the privilege of borrowing books has cost us next to nothing in the way of additional service at the desk; that it has not interfered with the use of the library by the faculty, and we do not believe that there is a single professor who would vote for the abolition of the newly granted privileges.

That the students themselves value their newly acquired privileges has been frequently attested by their individual expressions of appreciation, and by the use they have made of these privileges, but never more convincingly than in the Commencement number of their literary paper, where

among the things which in their opinion have made the year notable are listed:

"Haircutting abolished."

"Football saved."

"Yost becomes author and Benedict."

"Circulation of library books established."

When the question of library privileges looms up thus large in the student mind, who shall say that there is in it no room for aught but athletics?

College Libraries and the Undergraduate.

Mr. Arthur C. Benson, fellow of Magdalene College, Cambridge, in his latest volume of essays, entitled "From a College Window," says that the one room in his college which he always enters with a certain sense of desolation and sadness is the college library: there are in it so many books that are "no good for reading," as Dante Gabriel Rossetti used to say in his childhood of his father's learned volumes. Mr. Benson describes the books of his college library as "delightful, indeed, to look at; rows upon rows of big irregular volumes, with tarnished tooling and faded gilding on the sun-scorched backs. What are they?—old editions of the classics, old volumes of controversial divinity, folios of the Fathers, topographical treatises, cumbrous philosophers, pamphlets from which, like dry ashes, the heat of the fire that warmed them once has fled." With a large central university library into which pours the annual cataract of literature, Mr. Benson feels that these little ancient college libraries have no use left, saving as repositories or storerooms. "They belong to the days when books were few and expensive; when few persons could acquire a library of their own; when lecturers accumulated knowledge that was not the property of the world; when notes were laboriously copied and handed on; when one of the joys of learning was the consciousness of possessing secrets not known to other men." Mr. Benson wishes that some use could be devised for these college libraries but confesses that they are not even the best of places in which to work, now that almost every one can afford to have his own books in his own study, and with a comfortable reading chair. H

grants that it would be too expensive to keep these little libraries up-to-date and recognizes that this would bring up the question of what to do with the old books, which would soon be crowded out. Mr. Benson concludes that perhaps the best thing for a library like this would be, not to attempt to buy books, but to subscribe like a club to a circulating library and to let a stream of new volumes flow through the place and collect upon the tables for a time.

While neither the college nor the library described by Mr. Benson have their counterpart in this country, I think that some of us have seen American university and college libraries where there was as little of intellectual cheer and as great an absence of life as in the old Cambridge room of which we have just read. The interesting thing for us in Mr. Benson's essay is the suggestion that it would be well to devise some means of providing students with reading material. To have this come from one of the most conservative of the old world universities is encouraging to those of us who believe that the libraries of colleges and universities exist as much for the sake of the student (even though he be an undergraduate) as for the professor and advanced investigator. The needs of the undergraduate are of course much more easily satisfied than are those of the more advanced student or the teacher, but what I contend is that they are as real and as reasonable, and should have the same attention and consideration.

Personally, I believe that the librarian should be the special champion of the students' needs. The professors naturally buy books needed in their own departments. The library committee is flooded with requests for the purchase of large and expensive sets of learned publications which only rarely concern the undergraduate. On the other hand, the student who is working up a debate or writing a theme may find in Poole's Index or the Reader's Guide references to an article by a writer whose opinions would be highly valued. But the gaps in our Poole's Index sets are frequent and wide. They are in magazines which would not particularly interest a professor, unless he, too, happened to have a chance reference to them. They are magazines which, because of their being indexed in Poole and elsewhere, are much in demand by public libraries. Sets of these are grow-

ing scarcer year by year, and they are never likely to become cheaper than they are today. We have therefore tried during the year to pick up as many of these missing odd volumes and short runs as were offered to us at low prices. We were very fortunate in being able to secure several hundred volumes of these popular magazines in exchange for a large and miscellaneous collection of odd numbers and volumes which had accumulated in our duplicate rooms. Thus at very little cost other than the binding we were able to complete such sets as the Bookman, the Book-lovers Magazine (with its continuation, Appleton's Magazine), the Continental Monthly, Country Life in America, the Craftsman, the Galaxy, Littell's Living Age, and McClure's Magazine. This will reduce somewhat the number of times that desk attendants will have to say that we do not have the particular volume asked for.

Since the establishment of the circulation desk, the assistant in charge has frequently been asked by students to recommend some interesting books for home reading. In order to answer this class of questions and also to encourage the reading habit, we are installing this year on an exhibit rack near the delivery desk a changing collection of books selected with a view to interesting the students. It will in a way be an embodiment of Mr. Benson's suggestion of a stream of new books flowing through the Reading Room and collecting there for a time. The books will be marked by a red star ticket and known as the red star collection. By this means the charging clerk will know when a student brings up one of these books that there is (1) no reading room charge for the book, (2) that it is not to be renewed, and (3) that when returned, it is not to go to the stack. When the books seem no longer of immediate interest to borrowers, they will be retired to the stack by simply taking off the little paper red star and new books brought out to their place.

Summary of Accessions, 1905-'06.

During the past year there were added to the various libraries of the University 11,896 volumes, distributed as follows:

General Library.....	9,044	Vols.
Medical Library.....	1,335	"
Homœopathic collection.....	201	"
Dental collection.....	46	"
Shakespeare collection.....	252	"
Goethe collection.....	19	"
Law Library.....	999	"

 11,896 "

 Reported hitherto.....194,672 "

 Making a total on June 31, 1906, of.....206,568 "

Of the accessions to the General Library, 3,233 volumes were gifts and 758 were received in exchange. Of the accessions to the Medical Library, 505 volumes were gifts and 76 were received in exchange. There were also 25 gifts to the Homœopathic Collection and 66 gifts to the Law Library. Counting the exchanges as gifts, the latter amount to 4,663 volumes, or two-fifths of the entire number of accessions.

The most noteworthy fact in connection with the budget for the General Library last year was the cutting down of the departmental assignments by 25%. This was not due, as some professors seem to have thought, to the fact that we repaired the roof of the stack, nor because of the improvements in the reading room, but was necessitated by the growth in numbers of the departments in the Faculty of Arts and Sciences. The professors in charge of the following subjects were allowed \$150 each for the year 1905-'06:

American History	History
Applied Mathematics	Latin
Astronomy	Mathematics
Botany	Mechanical Engineering
Chemical Engineering	Museum
Education	Organic Chemistry
Electrical Engineering	Pharmacy
Engineering	Philosophy
English Literature	Physics
English Philology	Political Economy
Forestry	Rhetoric
General Chemistry	Romance Languages
Geology	Semitic Languages
Germanic Languages	Zoology
Greek	

Twenty-nine departments, at \$150 each, making a total of \$4,450.

Half units of \$75 each were allowed for Current Literature, Mineralogy and Music.

Six subjects were allowed quarter units:

- Higher Commercial Education
- Naval Architecture
- Psychology
- Sociology
- Administrative Law
- Insurance

Increase in the Book Fund.

As a matter of record it may be well to print here a petition submitted to the Board at its meeting in November, 1905:

I beg leave to call your attention to the urgent need for some immediate action in regard to the annual book fund of the University. You will remember that there were three separate petitions submitted to your Board last spring from the Library Committee of the Literary Faculty, from the Engineering Faculty and from the Medical Faculty, each calling for more money for books. None of these petitions were granted, but that they were based on actual needs, I have ample proof.

In 1893-94 the appropriations for books for all the libraries of the University was for the first time made a fixed annual sum of fifteen thousand dollars. Since that time there has been a manifold increase in the demands upon the law, medical and general libraries, but no increase in the appropriation for books. We are relatively much less able to meet the needs of the Faculty in the matter of new books than we were in 1893-94. The income of the University had practically doubled, but the appropriation for books remained the same, so that while in 1893-94 $3\frac{1}{3}\%$ of the income went for books, in 1903-04 only $1\frac{7}{8}\%$ was devoted to this end. In these same years the Faculty increased from 184 members to nearly 300 and the students from 2,659 to 4,000. Thus it will be seen that while the University has had a remarkable growth in resources, in students, and in the size of its Faculty, the library has not shared in full the prosperity and growth of the institution. If $3\frac{1}{3}\%$ of the total receipts of the University was a just apportionment of funds for books in 1893-94, then we should on the same basis be receiving today nearly \$30,000 for books, which is no more than what a number of the large university libraries have to spend.

In order to show just how we are relatively poorer in funds for the purchase of new books than we were in 1893-94, I would call your attention to the fact that while in that year there were only 400 periodicals regularly received at the general and law libraries, ten years later the number was 1,110. Not only has this increase in the outlay for periodicals cut sadly into the money available for books, reducing that in one department to a paltry sixteen dollars, but the binding of all such periodicals as are not assignable to the law, medical, homœopathic or dental budgets is charged to the general list and as a result there is next to nothing left in the way of a discretionary fund. While in 1893-94 the binding and repair of books charged against the general book appropriation of fifteen thousand dollars was only nine hundred, forty-nine dollars and thirty cents (\$949.30), last year this item amounted to twenty-one hundred and fifty-two dollars (\$2,152), and even then the unbound material accumulated at such a rate that we have been compelled to take on another apprentice and to increase the estimate for binding for the current year by 25%.

But to come back to figures. The following tables speak for themselves:

1893-94.	
Periodicals cost.....	\$1,062 93
Binding cost.....	949 30
Total	\$2,012 23
1905-06 (ESTIMATED)	
Periodicals and continuations.....	\$2,335 00
Binding and repairs.....	2,690 00
Total	\$5,025 00

Showing that while 86 $\frac{2}{3}$ % of the fifteen thousand dollars general book fund of the University was available for the purchase of books in 1893-94, only 66 $\frac{2}{3}$ % could at the best be counted on for this year. The overdraft from last year was so considerable as to materially reduce even these last figures. The only solution of last spring was to reduce the departmental appropriations by 25%, thus giving heads of departments \$150 in place of the \$200 to which they had been accustomed for twelve years. This reduction has seriously affected the work of many departments. At the last meeting of the Literary Faculty, November 6th, in answer to an inquiry as to whether there was any hope for a relief from the present conditions or any chance of having the 25% restored, I submitted the general survey of the situation as outlined above and added that it seemed necessary to send a petition to your body asking for a special appro-

priation at this time. On motion of Professor D'Ooge the Faculty unanimously supported the view of the case as I had presented it and instructed me to submit the matter to you at this meeting.

In order to put the exact state of the funds before you, I have drawn off the following figures. The appropriation for the General Library was, as usual, \$10,000.00.

Amount assigned on the basis of 75% of the grants of previous years to the several departments	\$4,800 00
Estimate for binding, 1905-06.....	2,690 00
Bills on General List paid since July 1.....	1,769 84
Express, freight and cartage on book purchases and exchanges, estimated at.....	150 00
Periodicals carried on General List.....	470 80
Continuations on the General List, estimated at..	800 00
Outstanding orders	247 90
Total	9,928 54

This leaves for orders on the General List..... \$ 71 46 which you will readily grant is a very small margin for the demands which can be expected to arise during the academic year. The amount needed to restore the 25% reduction in the departmental budget is \$1,690.17. I would therefore respectfully ask that the sum of \$2,000, the amount called for in the Library Committees's petition of last spring, be granted for the use of the General Library, the excess over and above the \$1,690.17 to be used for discretionary purposes."

While you felt that nothing could be done at the time, we were assured that we might expect a larger grant for books in the budget for 1906-1907. At the meeting held last May you voted the sum of \$20,000 for books for the current year, to be divided as follows:

General Library	\$11,000
Medical Library	3,500
Law Library	2,500
Engineering Library	2,500
Homœopathic Library	250
Dental Library	250
Total	\$20,000

This is a relief for which all are profoundly grateful. It has enabled the Library Committee of the literary faculty to restore the departmental apportionment for the current year to \$200, and also to recognize the claims of some of the younger members of the faculty who are in charge of subjects for which little or no provision had hitherto been made. The larger assignment to the medical faculty will enable them to fill out some of the most glaring gaps in their sets of periodicals. The engineering library is now for the first time put on a basis where some systematic work can be done toward rounding out the collection.

Exchanges.

During the past year the library received in exchange 758 items. Included among these were the following:

American Entomological Society. Transactions. Philadelphia, 1881-1904.

Egypt. Survey department. 24 vols.

New South Wales. Geological Survey. 15 vols. and 20 pamphlets.

Royal London Ophthalmic Hospital. Reports. (Completion of set.)

Royal Medico-Chirurgical Society. Transactions. 5 vols.

Amsterdam University. 51 dissertations.

Basel University. 75 dissertations.

Chicago University. 41 dissertations.

Columbia University. 22 dissertations.

Leiden University. 22 dissertations.

Lyons University. Annales. 32 numbers.

Oxford University. Anecdota Oxoniensia. 31 numbers.

Paris University. Annales. 31 numbers and 49 dissertations.

St. Petersburg University. 13 dissertations.

Würzburg University. 24 dissertations.

For years the University Library has been receiving numerous gifts of publications from various institutions for which we have been able to offer but little in return. Recently an attempt has been made to remedy this inequality of exchange by gathering such scattered material as could be had at little or no cost, and the library has thus been able to send out to a selected list of institutions a large number

of items. In October, 1905, a circular letter was sent to all members of the University faculty, asking them to provide us with as many of their papers and reprints as they could spare for this work. In response to this appeal a great variety of material was received, some of it several years old, but none the less acceptable. Mr. George Wahr, our local agent for American books and periodicals, contributed twenty sets of twenty-seven publications of members of the faculty bearing his imprint. These have been sent to a selected list of American and foreign universities.

One of the most noteworthy publications ever issued by members of any of the University faculties was the volume entitled: "Contributions to medical research, dedicated to Victor Clarence Vaughan, by colleagues and former students of the Department of Medicine and Surgery of the University of Michigan, on the twenty-fifth anniversary of his doctorate. Ann Arbor, George Wahr, 1903." While too much credit cannot be given to the men who unselfishly gave their time to the writing of these papers and the editing of the volume, it must not be forgotten that the financial risk of the publication was borne by Mr. Wahr. One thousand copies of the book were published, and although a fair number of subscriptions for the book was secured, the returns from the sales were slow and the book failed by a considerable margin to bring back the money expended by Mr. Wahr on it. Knowing that few copies had been sold to libraries and acting on the suggestion that everybody concerned in the publication would be glad to see copies sent officially to certain selected institutions, Mr. Wahr was asked to coöperate by making a special low price on fifty copies to be used in this manner. With his accustomed generosity and interest in the work of the University, he offered to furnish fifty copies for one hundred dollars, and a special appropriation of this amount was granted at the meeting of the Board held March, 1905.

Stored away in various places we have found from one to two dozen copies of publications of former members of the faculty,—such books as Professor Frieze's "Giovanni Dupré," Professor Brünnow's "Tables of Victoria," Dr. Ford's "Outlines of Anatomy," as also the edition of the *Adelphoë* of Terrence, published on the occasion of its pre-

sentation at the University in 1882. Letters were sent to a select list of American university libraries asking whether they had copies of these publications, and, if not, requesting them to notify us in case they desired complimentary copies on exchange account. Every library addressed wanted one or more of the publications in question.

Mrs. Albert B. Prescott contributed 35 copies of the volume which she had privately printed in memory of the late Professor Prescott. These were sent out with our spring shipments.

A special effort was made last year to increase the exchange list of the Michigan Academy of Science. As a result thirty-two additional institutions have entered into exchange relations with this library, which is the bureau of exchanges for the academy. The subjoined list will give some idea of the scope of the new institutions which have been added to the list:

Academia de Ciencias Medicas, Fisicas. Havana.
Académie Royale Suédoise des Sciences. Stockholm.
Asiatic Society of Bengal.
Botanischer Verein für die Provinz Brandenburg.
Verein für Naturwissenschaft zu Braunschweig.
Bristol Naturalists' Society.
Edinburgh Geological Society.
Société Géologique de Belge.
K. K. Zoolog.—Botan. Gesellschaft. Vienna.
Nova Scotian Institute of Science.
Real Academia de Ciencias de Madrid.
Royal Botanic Gardens, Kew, England.
Royal Irish Academy.
Royal Ophthalmic Hospital.
Royal Medical and Chirurgical Society.

Last May a copy of the seventh annual report of the Michigan Academy of Sciences was sent to a new list of 164 foreign scientific societies, with a request for an exchange of publications. Returns will not be in for some months yet.

Late in the year the Secretary of the Michigan Political Science Association turned over to us the file of its publications, consisting of 1,460 numbers, to be used for exchange purposes. Thus far we have arranged exchanges of this material for the following publications:

Indiana Quarterly Magazine of History.
Montana Historical Society. Contributions.
New Hampshire Historical Society. Proceedings.
Ohio Archaeological and Historical Society. Publications.
Texas Historical Association. Quarterly.

A systematic effort will be made during the coming year to extend this list and secure some of the more important historical and political publications in exchange.

By no means the least important part of the work of the year in this department has been the exchanging of duplicates with other libraries. In exchange for some of our miscellaneous duplicates we have received from the Library of Congress, the John Crerar Library and the Library of the University of Pennsylvania, many important additions to our collections, such as Pinkerton's "Voyages and Travels," 1808-1814 (17 volumes), and Baer's "Illustrierten historien-bücher," Strassburg, 1903.

The Special Funds.

Among the most important purchases of the year were the various series of publications of the Munich Academy, and the Institut de France on the Ford-Messer fund. On the Coyl fund were added the Supplement to the Catalogue of the British Museum, 1900-1905, a set of the *Revue des questions historiques*, 1866 to date, and the *Bibliothèque des écoles françaises d'Athènes et de Rome*, 1877 to date. The new collected edition of Swinburne's works, as well as Smyth's Franklin, were purchased on the Coyl fund.

About a fifth of the income of the Ford-Messer and the Coyl funds goes to keeping up the serials and the continuations of the sets bought on these two funds. A list of these continuations is given herewith.

THE COYL FUND.

Archaeologia.
Archaeological institute of America. Investigations at Assos.
Bibliothèque des écoles françaises d'Athènes et de Rome.
British school at Athens.
Egypt exploration fund publications.
Henry Bradshaw society.
Indische studien.

Manchester literary and philosophical society. Memoirs.
 Masters in art.
 Palestine exploration fund publications.
 Revue des questions historiques.
 Romanische forschungen.
 Selden society.
 Studio.
 Wyclif society.
 Zeitschrift der Savigny-stiftung für rechtsgeschichte.

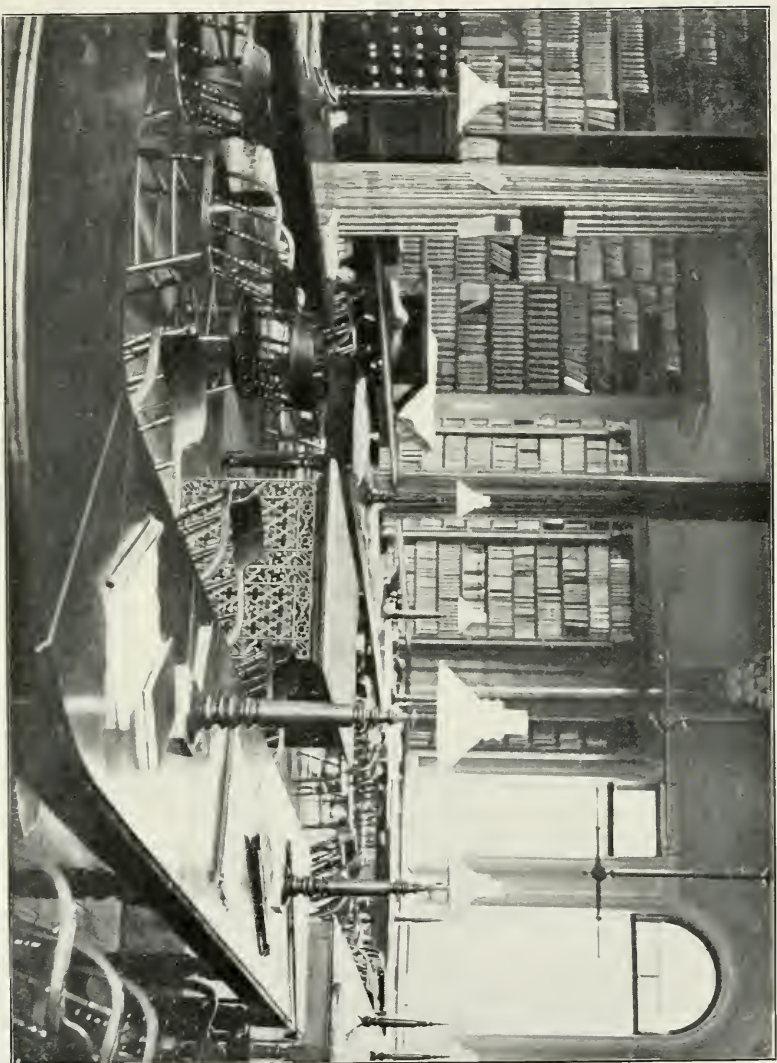
Also the following publications, some of which will be completed during the year:—

Baumont and Fletcher. Works. (Bullen.)
 Bissing. Denkmäler Aegyptischer sculptur.
 Conze. Die attischen grab reliefs.
 Facsimiles of rare fifteenth century printed books in the Cambridge University Library.
 Nash. Works. (Bullen.)
 Ruskin. Works. (Library edition.)

THE FORD-MESSER FUND.

Académie royale des inscriptions et belles-lettres.
 Accademia dei Lincei.
 Archivio storico italiano.
 Belgian academy.
 Berlin academy.
 Bibliothèque de l'Ecole des chartes.
 Corpus inscriptionum latinarum.
 Göttingen academy.
 Institut de France.
 Munich academy.
 Naples academy.
 Royal Asiatic society. Journal.
 Royal society of Edinburgh. Transactions.
 Society of arts. Journal.
 Turin academy.
 Venetian academy.

Without the aid of these special funds it would have been impossible for the library to have acquired many of the large and important sets which have been added to its stores during the last twelve years. We only hope that friends of the University will add to our resources by establishing more of these memorial funds.



THE UNIVERSITY LIBRARY IN 1878
(IN THE OLD LAW BUILDING)

PHOTO. BY J. A. JENNEY

The Public Catalogue.

The public catalogue of the University Library having been made on a unique sized card longer than the standard card in use by the majority of American libraries, it was necessary to discontinue using these cards if we were to benefit by the co-operative cataloguing efforts of the Library of Congress and the American Library Association. It was therefore decided to start a new catalogue, with the printed cards of the Library of Congress and the John Crerar Library as a basis, using the standard or "33" sized card.

This meant, of course, building up a new catalogue in standard sized trays, and a beginning was at once made by the purchase of Library Bureau catalogue cases. All new accessions were to be catalogued on the standard sized cards, and the recataloguing of such books as were used in the establishment of the reference library and the Engineering Library was to be done by the use of these same new cards (instead of by simply changing the call numbers on the cards in the old public catalogue). As books are recatalogued, the entries are withdrawn from the old public catalogue, and consequently as this catalogue diminishes in size the new public catalogue grows in volume and usefulness.

In the old public catalogue authors and subjects were in two separate alphabets. The new catalogue begun October 1st, 1904, was made on the dictionary plan. Three months later, during the Christmas recess, the old public catalogue was changed from the author and subject form to a dictionary form by combining the two in one alphabet. While many of the subject entries are not in the approved style followed by the majority of libraries today, it is just as easily used when in one alphabet, and there is less chance of doubt as to where to look for certain entries (as, for example, biography, statutes, etc.).

When books are recatalogued and the cards withdrawn from the old public catalogue, a printed card referring to the new catalogue is inserted. This was found necessary in order to attract attention to the new catalogue, which has been growing so fast that many very important subjects are now much more fully represented in it than in the old public catalogue.

When the above-mentioned changes were made, the special medical catalogue was incorporated in the general catalogue inasmuch as it simplified the search for such subjects as were treated of both in the medical collection and in the General Library. Under the old method any one who was interested in questions of anatomy would have to look both in the medical catalogue and in the general catalogue, for the books in comparative anatomy bought by the Zoological Department were catalogued in the general catalogue, while those on human anatomy bought by the Department of Medicine were catalogued in the medical catalogue. So, too, with books on the border line of chemistry and medicine,—one was never sure that he had all the literature on any particular subject unless he looked in both catalogues. The change of cards and the inception of the new catalogue left us practically no choice in this matter, as a supplementary medical catalogue on the standard size card would have increased the number of places in which to look for a medical subject.

The magnitude of the task we have undertaken is fully appreciated by the staff and myself (and probably by us alone), but the necessity for the change was very evident, and the sooner it was made the better. This library is but one of many which has had to meet this problem of recataloguing. The need for changing the size of card used will necessitate having two catalogues for some years to come; but even here we have the company of several other of the older libraries.

Shelf-List.

The shelf-list had originally been made on slips of paper ($8\frac{1}{2} \times 2\frac{3}{4}$ in.) held together in Leyden binders, but the latter having been found rather difficult to use, the slips had of late years been kept loose in pasteboard boxes. With the introduction of the use of printed cards of standard size it became necessary to make a corresponding change in the size of the shelf-list entries. Consequently the old thin slips of the shelf-list were cut down to the standard length and the new entries (consisting of printed or typewritten cards) were filed with them in a catalogue case. While the difference in height and thickness between the old slips and new cards makes the handling of these lists

rather difficult in comparison with that of the regular card catalogue, yet it is much more convenient to handle than formerly. Eventually all the old slips will be replaced by cards of standard size and thickness.

Catalogue of the Concilium Bibliographicum.

In 1896 the Biological Department began subscribing out of their book fund to the printed catalogue cards issued by the Concilium Bibliographicum of Zurich at an annual cost of from \$30.00 to \$40.00. Of these cards there were considerably over 100,000 when in the spring of 1905 the library was asked to take charge of the catalogue. The majority of the cards had been housed in drawers in various desks in the biological rooms in University Hall; some were kept in trays and still others packed away on shelves where they were practically inaccessible. As the catalogue contained much of interest to the students of comparative anatomy, histology and physiology, together with a full set of the cards issued by the Concilium on palaeontology, it seemed desirable to make it accessible to the general public by giving it proper accommodations in catalogue cases in the reading room. I therefore asked for an appropriation for two sixty-tray cases for their reception. The cards were brought over during the summer of 1905 and carefully arranged according to the scheme of classification laid down in the *Conspectus* of the Concilium.

A card catalogue of this sort must be kept rigorously up to the mark if it is to meet the requirements of an index to current literature. While it will take some time and labor on the part of the staff to handle the continuations, yet the library is the only logical place for this kind of work.

Orders and Accessions.

All orders are now sent out on typewritten sheets with a heading somewhat similar to the one in use at the Harvard University Library, and a carbon copy is kept in a vertical file index under the name of the agent with whom the order was placed. A new style of order card was devised for the use of the members of the faculty charged with the selection of books in their department and printed the

standard size (12.5 x 7.5 cm.) in order to permit of the card being filed in the official catalogue after the book has been received. When the book has been catalogued the finished card takes the place of the brief, rough entry of the order card. By this means the official catalogue of authors is kept more strictly up to date, and professors and others who use it are sometimes prevented from filling out an order card for a book which has already come, although not yet catalogued.

The "Standard accessions book," published by the Library Bureau, has been substituted for the large and unwieldy ledgers hitherto used for recording the books received from day to day. The size and form of the page, the machine-numbered entries with a book to a line, enabling one to count the number of volumes or entries at a glance, and the lining itself, all help to make the use of this form of record much superior to the ledger entries.

As soon as the invoice book and department account book at present in use are filled, we hope to substitute a vertical file system for these records.

Completion of the Book-Plating.

Until the acquisition of the book-plate, designed by Mr. J. W. Spenceley in 1904, the books in the library, unless bought from a special fund or the gift of some person or institution, were not marked by a book-plate. This new plate, reproduced herewith, combines in a happy manner the state seal with a modified form of that of the University. The use of pine needles and cones in the decoration is a pleasing reminder of Michigan forests, and despite the wealth of detail in the ornamentation of the plate there is a unity and dignity about the whole composition which is rarely attained in this style of work. Different impressions of the plate have engraved on the tablet at the bottom such varying inscriptions as "Reading Room," "Department of Law," "Department of Engineering," thus marking a particular volume not only as University property, but also indicating to what part of the library or University it belongs.

During the past year we have completed the plating of all books in the University libraries with the exception of

those in the Law Library. The latter will be plated as soon as the books can be looked over for repairs. At the same time all books, with the exception of those in some of the departmental libraries, have been marked in at least two places with a perforating stamp, "U. of M." This stamp (measuring $\frac{1}{4} \times \frac{3}{4}$ in.) furnishes a neat and effective mark of ownership for all plates, whether loose or included in books.

We now feel that the books are much better protected against carelessness and theft.

The Shakespeare and Dramatic Collections.

One of the largest special collections in the General Library is the McMillan Shakespeare Library which now contains in round numbers 6,000 volumes. The establishment of the collection was made possible through the generosity of the late Senator James McMillan, of Detroit, who purchased and presented to the University in 1882 the collection of 750 volumes which had been gathered by Colonel E. H. Thompson, of Flint, Mich.

Senator McMillan continued to provide funds for enlarging the collection as favorable opportunities for purchase arose. When the extensive Shakespeare library of Joseph Crosby, of Zanesville, Ohio, came into the market, over four hundred additional volumes were secured *en bloc*. For the past twenty-four years the auction sales in New York, Boston, and London have been watched for additional titles, and many choice and rare accessions have been made in this way. Hundreds of catalogues of antiquarian booksellers in England, America, Germany, France and Italy have been searched in the same way with like results. The current literature of the subject has been kept up-to-date so far as funds would permit, and the most important things have been purchased. Many volumes were secured in the early years that are now practically unobtainable on account of their rarity or the rapid advance in price. The collection as it now stands could not be replaced for several times the original cost, and the labor of collecting it would be now correspondingly greater.

This library is very rich in editions of Shakespeare's works. The quartos are present in the Griggs facsimiles. All

reproductions of the first folio thus far made are here. The second, third and fourth folios are represented by good specimens of the original editions. There is a large (though not complete) collection of the so-called "players' quartos." Beginning with Rowe's edition of 1709, all the editors are represented in their varying editions down to the present date, with rare exceptions.

An excellent beginning has also been made in getting together editions of the separate plays and poems, though much remains to be done in this difficult line.

The library contains translations of the Shakespeare text into twelve different languages, and includes a large body of German and French Shakespeariana.

Aside from editions of the texts, there is also a very full representation of the principal works of criticism and comment on the poet in English from the eighteenth century to the present time. It now seems as though this stream would never cease.

Since Senator McMillan's death contributions have been generously made by his son, the Hon. William C. McMillan, of Detroit, for keeping up the collection. During the past year he contributed \$100 toward its maintenance. The work of collection during all these years has devolved almost entirely upon Professor I. N. Demmon, in which work he has always had the sympathetic coöperation of the librarian.

Professor Demmon, as head of the English Department, invited the Ben Greet players to give Shakespearian performances at the University in June, 1905, and again in February and June, 1906. The proceeds (amounting to \$1,300) were by vote of the Board to be expended on dramatic literature, and many valuable purchases have already been made on this fund. Among some of the items secured may be mentioned early editions of Beaumont and Fletcher (including the folio of 1679) and Ben Jonson (including the folio of 1692); separate plays by George Farquhar and the collected works of Greene, Massinger and Marston; such rare journals as the "Dramatic Censor," 1800; "The Drama, or Theatrical Pocket Magazine," 1821-1825; "Harlequin," 1829; "The Stage Manager," 1849, and the "Stage," 1888-1889; various collections of English plays, including the "British Stage," 1741 (6 volumes); the "British Theatre,"

1791-1797 (34 volumes) ; Jones's "British Theatre," 1795 (10 volumes) ; Dibdin's "London Theatre," 1815 (10 volumes) ; Cumberland's "British Drama," 1817 (14 volumes) ; "Early English Dramatists," 1905-1906, and Bang's "Materialien zur Kunde des älteren englischen dramas," 1905-1906. Numerous plays by modern writers, as well as considerable theatrical history and biography, with reminiscences by well known actors, have been added to our already rich store of this kind of literature.

Medical Library.

Of the \$2,250 allowed the Medical Library for books, periodicals and binding, about \$1,000 was spent last year in keeping up the files of 226 periodicals and on continuations of serial works, and \$373 for binding. This left only two-fifths of the entire amount of their library budget for new books, or \$900, to supply the current demands of a faculty of some sixty members.

The special appropriations allowed by the Board to Dr. R. B. Canfield for some of the literature of otology, rhinology and laryngology, and to Dr. W. R. Parker for ophthalmological literature, enabled us to secure for these two new members of the medical faculty the beginnings of collections in their special fields.

In lieu of any report from myself as to the medical library, I venture to print here a rather full abstract of an article on the subject by Dr. George Dock, published in the *Medical library and historical journal*, July, 1905 :

The first recorded appropriation for the medical library was made in 1854, and was for the modest sum of \$66.00. There are no accession books or catalogues bearing date earlier than 1860, but from a record of that year it is fairly certain that the early appropriations were judiciously used. In 1860 there were twenty-four medical periodicals in the library, including some of the best in various countries. Most of these, particularly the European journals, began to be received in 1855. There are but few books in this early record, mostly chemical text-books, and it is evident that the chief attention was given to periodicals of a high class. In the first ten years, or up to 1865, \$1,000 were granted to the medical library, in sums of \$100 to \$500. The largest single appropriation, \$500, was given in 1860, and the liberal spirit of the authorities is shown by a minute of 1858,

repeated in 1860, as follows: "The medical faculty be requested to furnish the Board of Regents, from time to time, with lists of books required for the library." This generous spirit was soon checked, and the lean years of the Civil War left a gap through the ranks of the medical periodicals that was not filled until thirty years later. Those were clearly the days of small things. In 1871 the medical library contained 1,500 volumes, the accumulation of seventeen years. In 1884, or at the end of thirty years, there were 2,626 volumes and 614 pamphlets. In 1887 larger and regular appropriations began, and after that the yearly income was never less than \$1,000. The aggregate from 1889 to 1904, both included, was about \$28,000.

In 1891, sixty-one medical periodicals were received, but no attempt had been made to complete the various series, which went back only to the time the annual subscriptions were begun, from 1855 on. Striking exceptions were one or two chemical journals, and the *Archiv für Anatomie und Physiologie*, purchased in 1885, and complete from the beginning under Reil and through various changes of name and editor down to Du Bois-Reymond, His and Braune, with the division into two parts. There were a few volumes of *Virchow's Archiv*, but the great clinical periodicals were not yet taken.

In 1892 the writer became a member of the library committee of the medical faculty. A new and definite policy was adopted, having for its object the securing of the most useful literature, for investigators and instructors, that the necessarily limited funds would permit. Before that, the appropriation had been divided into as many parts as there were heads of departments, and expensive works could only be obtained when the common needs of two or more professors could be met by joining forces. Under the new system, which is still in force, the fund was managed as a whole by a committee of three. The basis of the new policy was the principle that the most important part of such a library should be made up of full sets of the most solid periodicals, especially those devoted to the publication of the results of original work in all the sciences bearing on medicine; and including also those which contain original articles besides news of the day, such as the better class of weekly journals. Such publications as would probably be needed only rarely were left out of consideration, as they could be borrowed from the Library of the Surgeon-General's Office.

A number of periodicals in various lines were added, and in 1893 the librarian could report 95 on file. Imperfect sets were rapidly completed, and by 1895 the leading periodicals then taken were complete from their beginnings, and several important series that had ceased publication, such as *Froriep's Notizen*, the *Deutsche Klinik*, the *Archiv der Heilkunde*, were obtained in complete series.

When new subscriptions were placed in subsequent years, efforts were made to obtain the back numbers and in many cases with success, though lack of money and of favorable offers have prevented the completion of many more.

Another feature of the same policy was the acquisition of important monographs, transactions of academies and societies, hospital reports, Festschriften and standard works of reference. A good deal has been accomplished in these lines, but as those familiar with libraries know, time and money, and not a little labor, are essential, and many important transactions alone, not to mention the other classes, are still on the want list. The rapid increase in the number of really valuable, one may truthfully say essential periodicals, makes progress slow in the other lines.

The purchase of the most necessary features of a reference library left but little for hand-books, text-books and laboratory manuals, and in many instances considerable inconvenience has resulted, yet the greater ease and satisfaction in the consultation of original sources goes far to compensate for the deficiency and it is hoped that in time the various works so useful for undergraduates can be more freely provided.

Periodicals. Two hundred and ninety-nine medical periodicals are regularly received, kept on file and bound as volumes are completed.

Two hundred and nineteen of the current periodicals are paid for by the University, the rest are furnished by the publishers or editors, and by members of the faculty.

Eighty-nine of the two hundred and ninety-nine periodicals are complete from the beginning. Including journals no longer issued and transactions, there are considerably over two hundred complete series. Many of the incomplete sets are American periodicals, the most difficult of all to fill out, on account of the imperfect development of the second-hand book trade in this country. Our chief resource with these is exchange, and we have been able to fill many wants through the kind offices of the Exchange of the Association of Medical Librarians.

The various countries are represented as follows: United States, 104; Great Britain, 24; France, 57; Germany and Austria, 94; Switzerland, 3; Italy, 8; Russia, 2; Canada, 3; Australia, 1; Japan, 1; India, 1; The Philippines, 1.

Of the various departments of medicine all are represented by the leading periodicals in English, French and German, and we have the assurance of making extensive additions in all these lines. The best of the German Archive, Zeitschriften and Beiträge are present in complete series; also the best weeklies and Centralblätter. The leading Paris Archives and Revues are almost all in the library in

complete series, but many valuable French provincial journals have not yet been taken, and there are also none from Belgium and the Netherlands. Very few of the Paris weeklies are taken, but we have the most important. The British periodicals of the highest class are all present in full series, but we still feel the need of many of the provincial journals and many desirable hospital and government publications.

Works of Reference. It is hardly desirable to give a detailed account of reference works, but some idea may be formed when I state that of the list given by Dr. J. S. Billings in his authoritative article on "Methods of Research in Medical Literature" we have more than one-half the titles and five-sixths of the volumes, lacking very few of the more important works. We have, of course, many others not in this list, as well as the continuations of all the serials still issued.

From the foregoing account the reader will probably gather the impression that the library contains a good working collection for its size, and that it is chiefly a modern one. This is true in general. Although *Rei's Archiv.* and *Hufeland's Journal* carry us back to the eighteenth century, the great bulk of the books bear date after 1845. The tall quartos and folios, the short, thick duodecimos, and the tiny 16 mos. and 32 mos., the hog's leather, vellum and parchment, the elaborate stamping and gilding that give such a peculiar charm to the libraries of Europe and are not rare in the long established collections of Brooklyn, Boston, New York, Philadelphia and Baltimore—these are not conspicuous by their absence, but are so few that they excite a feeling of wonder as to how they came here. The reasons for their scarcity are not far to seek. They obviously cannot be bought out of a slender income with many urgent demands upon it, nor has there been enough time to get many such books in other ways. Though young in years, the library was begun very soon after the men of the Stone Age withdrew from its seat. Some of the earliest pioneers are still living and can remember when Red Men were more numerous than books in this vicinity. Though there was culture, and even wealth, according to modest standards, among the early physicians of Michigan, leisure there was none, and the means of transportation offered difficulties not imagined by the men who founded the medical libraries of the seaboard cities. Until a very recent time, also, there were few towns large enough to make possible the formation of medical library associations, and the conditions were not favorable for the growth of private collections that in time might be given to the University. The spirit, however, has not been wholly absent, and a number of valuable books that could not have been bought out of the carefully scrutinized appropriations have been given to the library. In this way many classics of the nineteenth century were obtained.

The first notable gift, and one of the largest, was made by the widow of Dr. Benajah Ticknor, of the U. S. Navy, in 1861-1867. Among Dr. Ticknor's books were many of historic interest and bibliographic value, such as Bichat's "Anatomie générale." A number of rare works were also found in the library of Dr. Edward Dorsch, of Monroe, Mich. (1888). Others were given by Dr. C. L. Ford, for many years Professor of Anatomy in the University (died 1894); Mrs. M. S. Barney (1893); Dr. L. G. Doane, of New York, who gave a number of specially bound books, the personal copies of his father, Dr. A. Sydney Doane, who had edited the various works; Dr. Elizabeth Bates; Mrs. A. E. Richards; Dr. H. S. Jewett; Dr. Hermann Kiefer; Dr. Wm. J. Herdman; the family of the late Dr. E. S. Dunster, formerly Professor of Diseases of Women and Children in the University; Dr. S. A. Green, of Boston; Dr. John Uri Lloyd; Dr. Francis Delafield; Dr. A. Jacobi, and Dr. Francis Packard.

Among these books are some that should be mentioned more particularly. Mr. Albert M. Todd, of Kalamazoo, an enthusiastic and discriminating collector, has given many valuable books to the University, especially some relating to the history of chemistry, and more particularly to the chemistry of the essential oils. To the medical library he gave, in 1894, the Aldine *editio princeps* (1525) of Galen, an unusually well-preserved and handsome copy, formerly in the collection of Count Melzi and an object of much interest to connoisseurs at the World's Fair in Chicago. Among Dr. Jewett's gifts were the Plantin (1597) edition of the "Prolegomena and Prognostics" of Hippocrates, and Ambrose Paré's "Deux livres de Chirurgie: I. De la génération de l'homme. II. Des monstres tant terrestres que marins, avec leur portraits" (1573). Other noteworthy possessions are the "Sepulchretum" of Bonetus (1700), the Boerhaave edition (1725) of Vesalius, and the "Kraeuterbuch" of Tabernæmontanus (Basel, 1664), in a magnificent brass-mounted stamped pig-skin binding. Among more modern works should be mentioned the atlases of Cruveilhier, Lebert and Carswell; Rayer's "Maladies des Reins," and several of the best atlases of skin diseases.

The only distinct extravagance, but one that future generations will judge mildly on account of its interest, was the purchase of all the original drawings of the anatomist Luschka, brought about by the efforts of Dr. Hermann Kiefer, formerly a member of the Board of Regents of the University.

Most of the works on bacteriology, physiological chemistry and hygiene are in the faculty-room of the medical building, near the library. Several sets of periodicals on anatomy, physiology, pharmacology, bacteriology and pathology are in the laboratories of the

respective branches. No effort has yet been made to get duplicate sets of these periodicals, although the value of such duplicates is keenly realized. There are duplicates of the best American weeklies and monthlies (current) in the hospital, furnished partly by the publishers, partly by some of the members of the faculty. A number of works of reference, such as dictionaries, encyclopædias, systems, a few monographs, several works on the history of medicine, including the interesting "Masters of Medicine" series, are on the reference shelves of the reading room, accessible to all without ceremony. Bibliographies are arranged on shelves near the card catalogue. The current periodicals, formerly in a room not free to general readers, have recently been made accessible from the reading room, so that undergraduates as well as others may consult them without loss of time. . . .

A few words about our most pressing needs may not be out of order. . . . In the first place, the library belongs to an important state university, and draws students from all parts of the country. It seems desirable that they should have access to all the local medical literature, such as journals and transactions, in order to have some acquaintance with medical men and affairs in the parts from which they come and where they are likely to go. Such literature and that of various foreign countries not at present active in medical research and only rarely required for reference would also seem useful in a state university, especially one somewhat isolated by its geographic position, in offering a broader point of view to all classes of readers. For many reasons the complete absence of all Spanish-American literature is much to be deplored.

The use made of the library by members of the faculty should need no explanation. It should show, and I think it does, directly and indirectly in the publications of the members. It is more important to explain what advantages the undergraduates derive from the library. From an early period in the history of the medical department students have been encouraged to read. No formal courses are given in medical history or bibliography, but most of the teachers encourage definite reading in general and special lines. I speak more particularly of my own methods, simply because it is more convenient to do so. In the beginning of the third year (from entrance), in opening the course in internal medicine, I devote an hour to the use of medical literature, explaining the mode of using works of reference in my own branch, naming some of the works. I also explain the use of indexes like the *Index Medicus*, the *Index Catalogue of the Library of the Surgeon-General's Office*, and those of the *Journal of the American Medical Association*, the *Jahrbuecher*, *Jahresberichte*, *Ergebnisse* and *Centralblatter*, not forgetting the medical dictionary as a guide to the several strange tongues to



THE LAW LIBRARY

be encountered in the clinical years. I also name some of the most important works on internal medicine, especially American works since 1850, and give some advice regarding the use of the medical periodicals by undergraduates, not necessary to enlarge upon here. As I go over the subject of internal medicine I give references to important new articles. Occasionally, by way of change, I give a brief reading from a classic, as Huxham, Nathan Smith, or Gerhard on typhoid fever, Aretaeus on phthisis, etc. Once or twice a year I assign a symposium to four or five students, usually on a topic that has special importance at the time. So we have taken such subjects as agglutinin reactions, plague, serum treatment of diphtheria, the uses of tuberculin, cerebro-spinal meningitis, fourth disease. General and special reference lists are given to the referees, while the "inactive" members of the class are encouraged to discuss the fifteen-minute papers when read. More ambitious attempts, such as a seminary for the study of medical history and medical classics, have not been possible of realization on account of the lack of room where the sources could be consulted without disturbing other readers.

Law Library.

The administration of the Law Library is in the hands of a committee of the Law Faculty, with one of its members immediately in charge as Librarian. The staff consists of a trained assistant librarian and two desk attendants. All purchases of books are made by the Law Librarian under instructions from the Library Committee, except in the case of small items which may be purchased by the Librarian on the request of an individual member of the Faculty. The amount of money available for the purchase of books necessitates rigid economy and a close scrutiny of the needs of the Department. In selecting the books, the claims of the student body have always been kept in mind; in fact up to the present time the needs of the students have been the main consideration.

Students have free access to the shelves, with the exception of those containing text-books and case-books used in class work. They are not permitted to take the books from the library save in exceptional cases.

Judge Lane, as Librarian of the Law Library, reports that on June 30, 1906, there were 23,491 volumes accessioned and on the shelves of that library. During the academic year 1905-06 there were added 999 volumes, of which 66 were gifts.

In addition to the volumes included in the above count there are about one thousand volumes which have not been accessioned, and of those which are accessioned 1,327 are stored apart from the working collection of the department on account of the lack of room. These are naturally the publications less likely to be called for, but if there were room for them on the regular shelves they would be gladly placed there.

In round numbers the library consists of 9,000 volumes of American reports; 5,000 volumes of foreign reports; 1,000 volumes of statute laws (foreign and domestic); 1,500 volumes of selected and annotated cases; 200 volumes of digests of reports, foreign and domestic; 3,500 volumes of text books, treatises and encyclopedias, while the remainder are miscellaneous in their nature. While the bulk of the collection is shelved in the main room of the Law Library, there is a considerable number (mostly duplicates) in the faculty reading room and a few in the students' consultation room. A fair collection of digests, encyclopedias, indexes and tables of cases, together with text-books, makes the mass of material in the library available to both students and faculty.

The main room accommodates 216 students, and the students' consultation room about 40 more. The faculty room has been found of great convenience as a place for quiet work needing easy access to books.

Among the needs of the library, next to the very imperative one of additional shelf room, Judge Lane emphasizes the necessity for providing more material not so readily classed as "tools of the trade." "If we are to attempt something more than the making of mere mechanics in the law," says he, "we must give more and more attention to the scholarly side of it." Attention is called to the need of filling up the gaps in statute laws, both foreign and domestic, as also the shortages in the series of reports of cases in courts of last resort.

Current continuations constitute the largest item in the budget of the Law Library, and this factor is continually growing still larger, owing to the increase in the number of the courts, and the amount of business transacted. New periodical publications must be subscribed for from time to

time. The library fee of two dollars, which is collected from every student in the Law Department, goes towards the payment of these serial subscriptions and continuations.

Engineering Library.

In March, 1905, some three thousand books relating to engineering were removed from the General Library to a specially designed room in the new Engineering Building. The collection embraced the most useful books possessed by the library on civil, mechanical, electrical, military and naval engineering, including 1,702 bound volumes of periodicals and society transaction. Owing to the large number of students in the Engineering Department and the desire of the Faculty to build up a strong departmental library, it was decided to ask for a trained assistant to take charge of this work. Miss Olive C. Lathrop, of the Catalogue Division of the Library of Congress was appointed to the task, and in the seven months during which she held the position she was able to catalogue about two-thirds of the collection and revise the classification where it needed adjusting to the demands of the department. Much credit is due her for the way in which she handled the problems arising during the progress of the work.

It would have been impossible for us to have accomplished this extra work had it not been for the use made of the printed catalogue cards issued by the John Crerar Library. Using these in connection with the Library of Congress cards, enabled us to make a special catalogue for the Engineering Library, duplicating the entries in the public catalogue in the main library, and providing author entries for the official catalogue and shelf list.

The number of students making use of the library varies from time to time (as in the main library), but in the Engineering Department there is a closer connection between the schedule of lectures and laboratory work and the attendance in the library. In the afternoon, when most of the students have their laboratory work, the attendance is noticeably smaller than in the morning, when more lectures are scheduled.

A larger proportion of students are constantly learning how to use the library intelligently, and in consequence the

books are beginning to mean much more to them than formerly. With free access to the shelves the students are becoming much more familiar with the literature of their subject than they could ever be expected to be when the books were housed in the stacks of the main library.

Additional Equipment.

When in 1883 the library building was turned over to the officials of the library it could hardly be said to have been furnished. There were the desks with the fixed chairs in the reading room, but the room was devoid of shelving and the seminary rooms were entirely bare. There was no furniture in the office and no catalogue cases in any part of the building. It is true that most of the library furniture and equipment, which is today considered essential, was unknown a quarter of a century ago. A large portion of the special appropriation which I have asked for during the last two years has gone towards the purchase of suitable equipment. In selecting the various cases and office furniture bought during the past two years we have tried to get the most approved patterns and the best workmanship. Much of this material is like tools to a workman,—the best are the cheapest in the long run.

An extension of the dictionary case to twice its former size has enabled us to put into the reading room some of the more special and advanced reference works in this line, and the construction of a map case has relieved the top of the dictionary case of the large folios which formerly cluttered up the top of the latter. Rubber matting laid down the main aisles of the room has reduced the noise incidental to the rush at the time of changing classes. Racks for hats, coats and umbrellas, placed in both the reading room and periodical room have been much used by those who formerly laid their wraps on a table or window ledge. An ice-water tank in the east hall has been much appreciated by the students. Four rubber-tired book-trucks have helped to lighten the work of cataloguing and classification.

In September, 1905, the seats at the table in the reading room and in the seminary rooms were numbered, so that in case of a long search for a book the number of the

reader's seat could be put on the call slip and the book, when found, could be delivered to the seat number indicated. This is found to be a convenience in some instances, being especially helpful in locating books which are in demand. Metallic standards, bearing placard holders, have been placed on the tables to accommodate synopses of the decimal classification and other information which we wished to place conspicuously before the students.

A Japanese gong, sounded a few minutes before closing, has served to announce this fact better than the verbal announcement, which was so frequently needed heretofore.

General Repairs and Renovation.

A very large portion of my time during the last two years has been given to the care of the building, the study of its condition and needs, the planning of the changes made and the supervision of the work as it was being done. While I have found much satisfaction in seeing these necessary things done, it has taken me away from the more specific library work. Fortunately there were able assistants at hand to whom much of the routine work could be assigned.

Of some of the material changes in the building, I have already spoken.

Among the larger repairs might be mentioned the extension of the eaves over the stack so as to prevent the wetting of the walls by the melting snow accumulating in the old stone gutters and working in under the slate roof. The leakage in the central room of the art gallery was so frequent as to have spotted up the walls in four places and to necessitate the renovation of some of the timbers. The room was repainted and the pictures rehung so as to bring the best canvases together.

The crowded condition of the stack and the rapid growth of the collection of the United States public documents forced us to devise some means for housing 4,500 large octavo and quarto volumes of federal publications in providing for the growth of the next few years. At the meeting of the Board of Regents for December, 1905, I presented a request for the erection of shelving in the so-called "whispering gallery" to house these books. The Building

Committee authorized the erection of a series of shelves against the inner wall. This shelving accommodated about 3,500 volumes. Two months later the Board authorized a second row of shelves erected under the sloping roof three feet from the first row, thus leaving a passageway of the same width as in the stack. The transfer of the documents to this new document gallery was easily effected by the use of student help allowed by the Executive Committee. The removal of books from the stack permitted us to spread the general collections and to make room for the growth of the present year.

The introduction of two sixteen-inch holophane spheres for central lighting of the reading room was a change much appreciated both by the staff and the readers. The sphere over the dictionary case in the center of the room should, however, have 32-candle power lamps instead of 16-candle power, as there is not at present enough light to consult with ease the dictionaries and atlases shelved there.

The wooden hoods over the two entrances to the library have been replaced by wired glass with gutters and pipes to carry off the rain and melting snow. The old hoods, which were built to protect the steps from sleet and ice, did not really remove the danger from slipping; they merely created a pitfall a little beyond the steps. Incidentally they robbed the vestibules and hallways of much needed light.

The small windows in the basement quarters of the bindery and printing office have been much enlarged, and the old sash replaced by French windows.

Crowded Condition of the Building.

While the building is crowded from basement to garret, and the book-stacks are filled to overflowing, there are several places where the shoe pinches particularly hard. Owing to the increased size of the staff, the librarian's office was last year divided into two parts by a book-case running nearly the full length of the room; on one side of this case there are desks for the librarian and the librarian emeritus, on the other side the entire work of ordering and accessioning the new books is carried on. Thus from having an office, the librarian has been reduced to nothing but desk

room in crowded quarters. Under these conditions consultation and dictation become at times difficult.

The cataloguers, too, have worked at great disadvantage. Their work room has been very much crowded and the light at the farther end has been quite insufficient. Recently some relief has been secured by partitioning off the corner of the reading room nearest the catalogue room and assigning this space to some of the assistants engaged in the preparation of the books for the shelves.

The need for more ample accommodations for advanced students and candidates for the doctorate to pursue their investigations in the midst of the books they are using, and for table room in the stacks for investigators who have to cover a wide range of literature, has long been felt and often referred to. Professor Emerton, in discussing the needs of the Harvard Library, pointed out in the *Harvard Graduates' Magazine* (vol. 7, p. 509) that the common phrase "laboratory method" as applied to the teaching of the humanities implies that the very existence of effective instruction along these lines depends upon a suitable provision for the daily practice of all concerned. "As the chemical laboratory," said he, "demands ample supply of chemical materials, ample space for each student, and liberal opportunity for the teacher to pursue his own researches in close association with the students whose work he directs, so the effective use of the library makes similar demands. A chemical laboratory with no room for a teacher would be a ludicrous anomaly."

At the request of the editor of the *Michigan Alumnus* I contributed to the issue for January, 1906, a brief statement of the needs of the library in the matter of additional room and a revised summary of the facts there stated may not be out of place here.

Although erected but twenty-three years ago, and extended but seven years ago, the building is in crying need of a still further extension. When the library moved into its new quarters toward the end of 1883, it contained 43,366 books and there were accommodations in the way of shelving for housing comfortably about 80,000 volumes, which at the rate the library was then growing would have provided for only eight years of accessions,—much too small a

margin for growth. The architects had estimated the shelf capacity at 113,000 volumes, on the basis of ten volumes to the foot, which may be correct for a public library, but we find that seven volumes to the foot is nearer our average. When after several years of great crowding and temporary makeshifts an addition to the stack was built, the number of volumes in the building amounted to 116,000,—but the books overran every conceivable corner of the stacks, blocking the passageways and even the windows. Consequently when the library took possession of the completed extension to the book-stack in the fall of 1899, its two floors of shelving for the ordinary run of books were soon filled up with the overflow from the old stack. The upper floor, having been screened off for the reservation of rare books, maps, music, photographs and other special collections, naturally did not fill up so fast as the two lower floors. In the new stack the cases were able to contain only six shelves as compared with seven in the old stack. Its total capacity was therefore only 54,000 volumes as compared with the 80,000 of the original stack. As the library contained 36,000 volumes in excess of what should have been put on the shelves of the first section when the second was added, and accessions were accumulating at the rate of 7,000 volumes per year, it took but three years to reach the limit of the capacity of the new stack.

What, then, has the library done with its new books since 1902? It has had to make use of temporary shelving placed along the side walls and in the windows, where the sun has been playing havoc with some of the binding and paper of these latter-day books, and where they have been a menace to the security of the building from fire. We have been able to accommodate the accessions of the last two years only through the shifting of books made possible by the establishment of the reference library in the reading room, the opening of the engineering library, the erection of shelving in the librarian's office and in the "whispering gallery," and additional shelving in the west seminary room. But all these new cases together hold only 16,000 volumes, which is less than the number of accessions during the last two years. It is true, however, that the public documents and other books moved from the stacks average larger in size than the general run of accessions, and so we are in

better shape than we were two years ago. But unless relief is soon afforded, we shall again have to resort to the old expedient of movable shelves in the aisles, books behind books, and books on top of the cases where they can only be reached by getting on a high stool or a stepladder. This, however, would only stay off for a year or so the day when we shall be forced to move the less needed books out of the building. Meanwhile, the work of the library must suffer and with each new shipment of books the problem of finding shelf-room for them will grow more serious. As Mr. William C. Lane, the librarian of Harvard University, has aptly put it, a well ordered book-stack is like a sponge partly filled with water; a book-stack entirely filled is as impossible to deal with as a sponge when completely saturated.

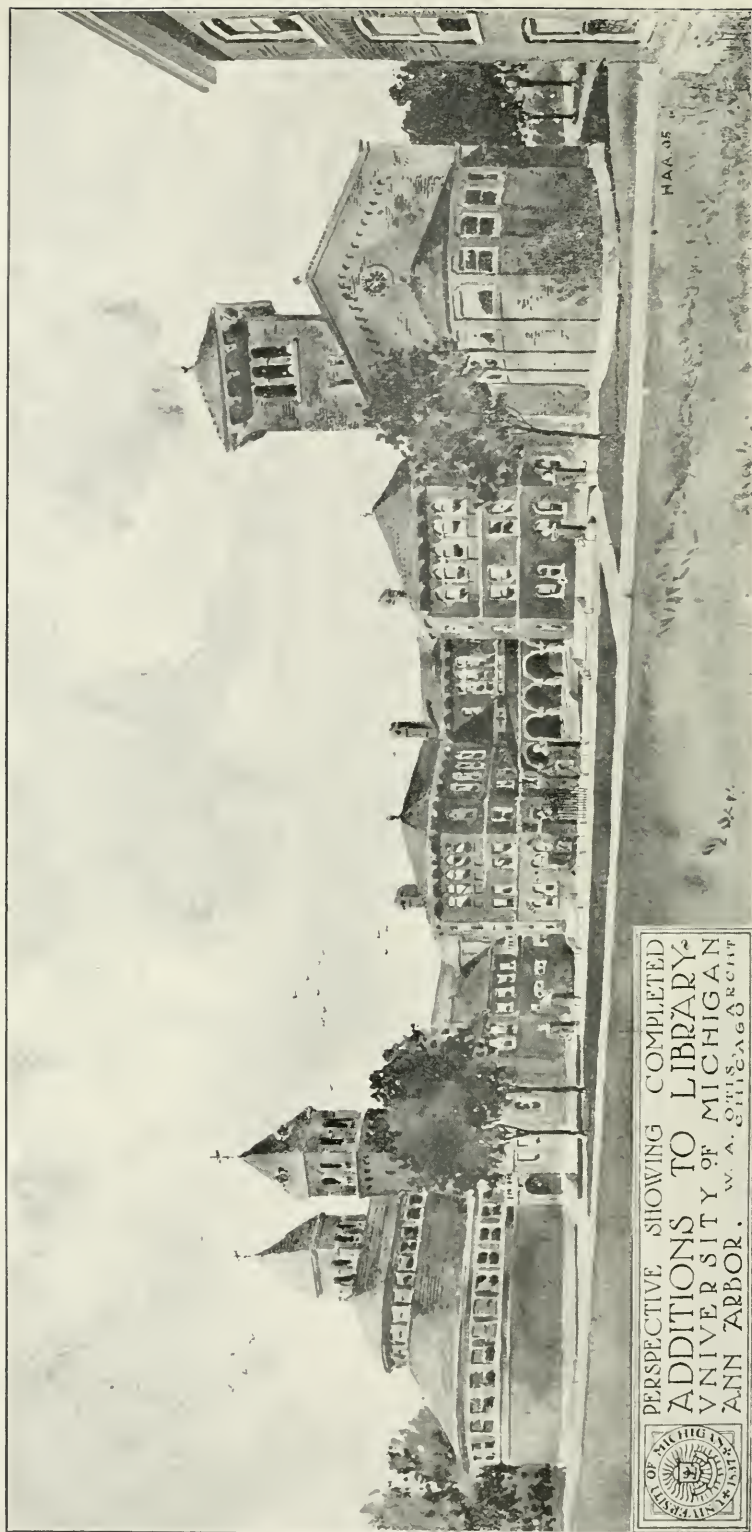
What relief is possible from this congestion? Two alternatives naturally suggest themselves,—either enlarge the building or remove the art collections in whole or in part, and devote the space vacated to the uses of the library. As the library has been growing at the rate of 12,000 accessions per year, and with the larger appropriations is sure to grow faster, and many years have passed when there was not a single addition to the Art Gallery, it is easy to conjecture as to which department will eventually crowd out the other. I understand that the plan of the Board, as well as the hope of the members of the faculty immediately interested in the art and archaeological collections, is that a new Art Gallery will be provided in the near future, possibly in connection with the proposed Memorial Building. In view of these facts a free discussion of the question is in order.

If it has been decided that the art collections are sooner or later to be moved out of the building, then it seems to me perfectly feasible to begin now by turning the south room into an alcove stack-room. The portraits now hanging on the west wall could be easily accommodated on the walls of the reading room, and wall space for such of the other pictures as are worth hanging could be found in the hall and stairways. The south room could carry a two-story stack, with eight alcoves, thus providing accommodations for over 25,000 volumes and table-room for members of the faculty and advanced students. The room would be reached from the third floor of the old stack by cutting through the floor

of the Art Gallery and adding another flight to the stairway at the south end of this stack. Thus equipped the room would serve admirably for the uses of the medical library, now crowded into the third floor of the old stack, where there are no accommodations for working with the books, for reading or transcribing. This arrangement would free enough shelf-room in the old stack to enable us to shift our entire collection of books and take care of the accessions of the next two or three years. If by that time a new art gallery were secured the remaining two rooms could be vacated and the library take possession of them. The present statutory room would make an excellent supplementary reading room for advanced students, while the next room could be treated in the same way as has already been suggested for the south room.

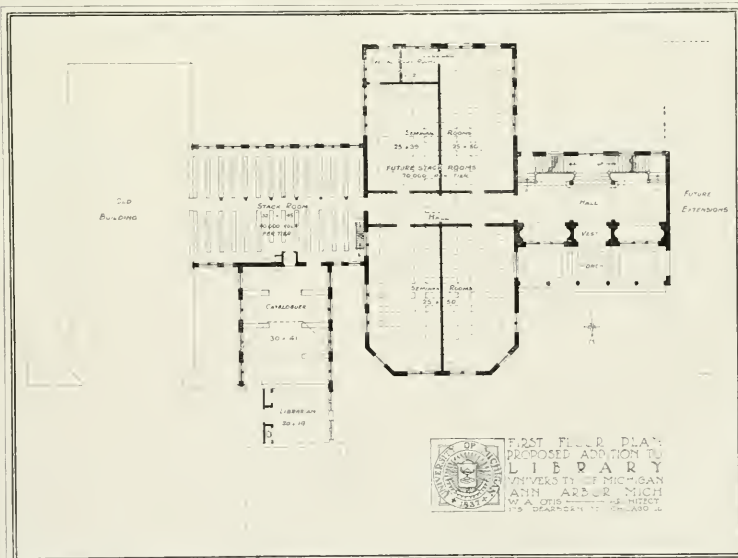
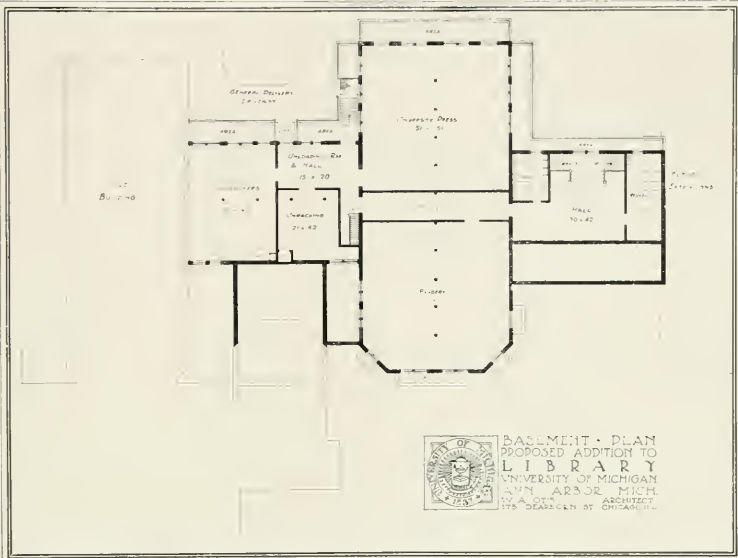
If, on the other hand, the art collections are to remain in the building, the first question which arises is as to the direction in which the extension should go. Owing to the recent extension of the Physical Laboratory, the library cannot now be extended any farther south, even had it been desirable. Nor could it grow northward on account of the semi-circular reading room. The southern section of the stack might be added to either on the east or west, or on both sides. To the east it could hardly go farther than the width of the fore part of the building, and a symmetrical structure might be secured by building to the west at the same time and then extending the periodical room and administrative rooms to meet the new wings. This would have the advantage of keeping the delivery desk in the reading room still in the center of the building.

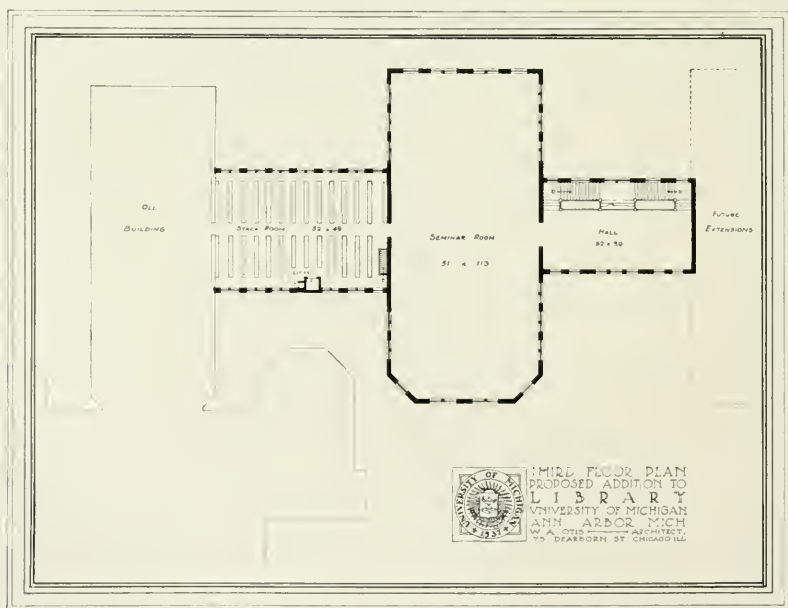
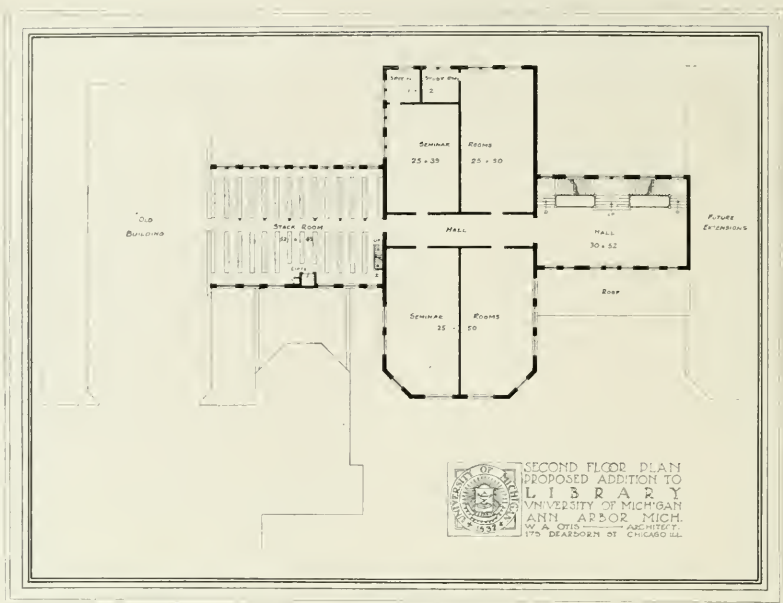
Mr. William A. Otis, of the class of 1878, has suggested a scheme for the extension of the building to the west, which has many very excellent features. His idea would be to build a six-story stack at right angles to the present one, with basement to be used for the bindery and printing plant. To the west of this would be a series of seminary rooms where one floor would correspond to two floors of the stack and be so constructed that if at any time in the future the stacks needed further extension, the seminary rooms could be wholly or partly converted into stacks by the introduction of glass flooring and iron cases. In the latter event, a



PERSPECTIVE SHOWING COMPLETED
 ADDITIONS TO LIBRARY
 UNIVERSITY OF MICHIGAN
 ANN ARBOR. W. A. OTIS & CO.







new series of seminary rooms could be built to the west. In fact, the building would be capable of several extensions in that direction before encroaching upon the neighborhood of University Hall. In the accompanying perspective Mr. Otis has shown a completed series of such extensions, terminating in a second reading room to be devoted to some such special use as that of a medical library. The ground plans reproduced herewith relate to the first stage of the extension, the one needed today, unless we are allowed to grow upward into the region of the Art Gallery. The whole plan suggests numerous possibilities. The central hallway would furnish an excellent place for memorial tablets and exhibition cases; study rooms might be opened on either side and, if furnished with proper reference books, would relieve very greatly the crowded condition of the main reading room. Mr. Otis has added a pleasing touch in his suggestion for the approaches to the extension and the laying out of the grounds around the Tappan Oak. The benches and gates might also appeal to senior class memorial committees.

Personnel of the Staff.

The library staff has been increasing in numbers and efficiency during the last two years. Fewer student assistants have been employed at the desk and more library school graduates have been appointed to the staff. We now have graduates and former students of the New York State Library School, and of the library schools of Pratt Institute, Drexel Institute, and the University of Illinois.

During the year we lost the services of four excellent assistants, who resigned to accept better paying positions elsewhere. While we are always glad to help our assistants to any vacancies in the library world which we feel they are able to fill, and have even suggested better positions to some, yet it is a distinct loss to have the personnel of the library staff change too frequently. A certain number of changes must be expected from year to year. In view of the small salaries paid our assistants it is but natural that after a time they should feel that they were entitled to some promotion; when this was not forthcoming several of them accepted positions in other libraries. The demand for good

library assistants is keener than ever and if we are to retain the services of the efficient corps of workers whom we have trained to our ways, it will be necessary to pay higher salaries. Good cataloguers, who are college graduates and have had a special library training, should certainly be paid as much as the stenographers employed by the same institution.

A Retrospect.

In closing this report I wish to express my sincere appreciation of the favorable consideration which your Board has given to the many recommendations which I have presented to it during the last two years, and of the kind welcome accorded to me, by the faculty, by the library staff and especially by my predecessor. Without the freedom to experiment allowed me during the year in which Mr. Davis and I shared the administrative duties of the office it would have been impossible to accomplish what has been done. A less generous chief might have held in check some of the innovations introduced by his subordinate, but Mr. Davis never once hinted a doubt of the wisdom of the many changes that were introduced by me during that year. If I should reach the age of three score years and ten, I hope that I may be able to show the same charity and generosity towards younger men as my former chief has shown towards me. Many of the things which I have been able to inaugurate would doubtless have been instituted by him had the means been at his disposal; with the larger appropriations which you have granted the library we have been able to branch out into new lines and to pay more attention to the questions of the reading room service and the card catalogue. With the larger staff which you have allowed me, I have been able to delegate to capable assistants much routine work which formerly devolved upon the librarian.

In one of Mr. Davis's earlier reports, he said that those charged with the interests of the Library regarded accumulation as the duty lying most heavily upon them. The burden of this duty fell heaviest upon Mr. Davis, and he should have been granted more help. In his last report to the Faculty, October, 1905, he took leave of them as librarian with these words:

"I have for twenty-eight years been the recipient of the confidences of this faculty in regard to their need for books—not of course, because it was supposed that I had any power to alter things, but because I was accessible, and, perhaps, because I appeared sympathetic, as I certainly was. When a man has told me that the need of certain books that he could not have was affecting his teaching unfavorably, and his protestations have been accompanied by moisture in his eyes, and some difficulty in articulation, could I—could anyone—be other than sympathetic?

"If I were asked to characterize in a few words my work as librarian my answer would be ready: *A struggle for books*. If my existence should be so prolonged that impressions made upon me grow faint and disappear, I am sure that the memories of that struggle will remain.

"It has been a great pleasure to me to realize that slowly, but surely, the growth of the library has been lessening the causes of such emotion as I have referred to, and I trust that my successor will be spared such drafts upon his sympathies. The library can now meet wants that it was powerless to meet a few years ago, and there are evidences of a growing interest on the part of the governing Board in this department of the University.

"Concerning the relations that have existed and now exist, in a general way, between professors and librarians the world over, I am not specially informed. I may say, however, that where I have known anything of these relations, either through gossip, or in literature, they have more commonly been pleasant than otherwise. In regard to my own experience, I am very clear. I can recall only the most courteous treatment, only kindness and consideration, not only on the part of those composing the faculty now, but also on the part of those who, in the more than a quarter of a century, have died, or, living, have gone from the University to other fields of labor."

Mr. Davis's services covered a longer period than that of all three of his predecessors in office. How faithfully he served the institution you all know. It was he who built up the Library to its present proportions; when he assumed the duties of his office in 1877 the entire collection of books amounted to only 23,000 volumes; when he relinquished the task there were 182,000 volumes. Beginning where Mr. Davis left off, I naturally face a different set of problems. To solve these problems I shall need your constant coöperation. We shall need still larger appropriations. That the library of an institution of learning merits the

closest attention, and the heartiest support, is becoming more and more generally recognized. "The American college," said a prominent educator, "has in its library an instrument of mighty usefulness for serving mankind. No wisdom is too practical, no consecration too hearty, no endowment too rich, to be devoted to its development. No house is too fair or too fine for holding its books, only provided the house facilitates their use. No administrative expense is too costly for making its resources more accessible. The library is worthy of the best, for it helps to make the best in the student and the teacher."

Respectfully submitted,

THEODORE W. KOCH,

Librarian.

October 26, 1906.

APPENDIX I.

RULES REGULATING THE CIRCULATION OF BOOKS.

Adopted by the Board of Regents, Jan. 19, 1906.

I

The Library is open every week day from 7:45 A. M. until 10 P. M., except Thanksgiving Day, Christmas, New Year's, Fourth of July, and certain days for cleaning. During the summer vacation the hours are 8 A. M. to 5 P. M.

II

Books may be drawn by all officers and students of the University and by others having special permission. Officers of the University shall be accorded preference over others when a book is in demand by several people and the Librarian may, on the request of members of the Faculty, recall for their use books that may have been lent to other persons.

III

Books must not be taken from the Library until they have been charged at the Delivery Desk. The length of time which a book may be kept out by a member of the Faculty will depend upon the nature of the book and the use for which it is intended. *New fiction, biography and books of current interest are limited to one and two weeks.* All books borrowed by members of the Faculty shall be returned on or before the first day of the December vacation, and on or before the Thursday preceding the Annual Commencement in June. Accounts with members of the Faculty shall also be checked up at the beginning of October and before the April recess.

IV

Works which are rare, costly, or otherwise unsuited for general circulation are lent only under special conditions and at the discretion of the Librarian.

V

Students are allowed the privilege of borrowing two books at a time, with a limit of two weeks on each book. For each day that a book is kept out overtime by a student there shall be imposed a fine of five cents a day; the fine to be paid when the book is returned. If the book is not returned within ten days after it is due, the borrower shall be required to pay the accumulated fines and the value of the book.

Members of the Faculty are expected to give due notice to the assistants at the Delivery Desk of books to which they have referred their classes, so that these books may be reserved for use in the library.

VI

Students are permitted to renew books at the expiration of the two-week period, except in the case of books in demand, books asked for by another borrower, and books overdue. Application for renewal must be made in person.

VII

Students applying for the privilege of borrowing books for the first time must sign a registration card at the Delivery Desk, where the necessary information will be given. For the present books can be borrowed by students for home use only during the hours 8 A. M.-12 M., 1-5 P. M.

VIII

Students who leave Ann Arbor for an absence of more than a week must first return all borrowed books.

IX

Any person who desires to obtain from the Library a book already lent will receive, on request, prompt notice of its return. If not a book in demand, it will be held subject to his order for two days; otherwise for one day. Any borrower may be notified that a particular book held by him has been applied for and that its return is desired.

X

No student shall be recommended for a degree until he has returned in good order, or replaced, every book that he has borrowed; or, in default thereof, has deposited with the Librarian the value of it in money; or, if it belong to a set, the value of the whole set in case the single volume cannot be purchased separately.

XI

The reference books in the Reading Room are not intended for circulation. They must on no account be removed from the Reading Room, except with the express permission of the assistant in charge of the Reading Room, and they are to be used with a due regard for the rights of others. Books in the reference library may, at the discretion of the Librarian, be loaned to students after 9 P. M. for over-night use, and over Sunday. They must be returned before 8 A. M. Failure to do so will subject the borrower to a fine and possible withdrawal of the privilege.

XII

The book-stacks are not open to the students in general, nor to the public; but admission to a specified section of the stacks is given, at the discretion of the Librarian, to students recommended by an officer of instruction.

XIII

The Library does not furnish dictionaries for continuous use, nor does it lend manuals or texts for use in class-rooms.

XIV

Any person who is known to be pursuing systematic investigations in any department of study may be allowed, at the discretion of the Librarian, the full use of the Library for a period not exceeding three months. Persons introduced by an officer of the University may be permitted for a short period to take books on the officer's account, but acquire thereby no other special privileges.

APPENDIX II.

List of published theses presented for the degree of Doctor of Philosophy at the University of Michigan.

NOTE:—The date following the author's name indicates the year in which the degree was taken.

Adams, Ephraim Douglass. 1890.

The control of the purse in the United States government. *In* Kansas Univ. quarterly. Vol. 2, 1894, p. 175-232.

— — *Same, separate.*

Allcn, George Henry. 1903.

Centurions as substitute commanders of auxiliary corps. *In* Univ. of Mich. studies, Humanistic series. 1904, vol. 1, p. 333-394.

Baldwin, Frederick Amos. 1905.

Pathological anatomy of experimental nagana. *In* Journal of infectious diseases. 1904, vol. 1, no. 4, p. 544-550.

— — *Same, separate.*

Bigelow, Harriet Williams. 1904.

Declinations of certain north polar stars determined with the meridian circle. *In* Proc. of Wash. acad. of sciences. 1905, vol. 7, p. 189-249.

— — *Same, separate.*

Buck, Gertrude. 1898.

The metaphor: a study in the psychology of rhetoric. 2, 78 p. Ann Arbor, Mich., Inland press, 1899.

Campbell, Douglas Houghton. 1886.

The development of the ostrich fern. *In* Memoirs of the Boston soc. of natural hist. 1887, vol. 4, p. 17-52.

— — *Same, separate.*

Clark, Frederick Converse. 1891.

State railroad commissions and how they may be made effective. *In* Amer. economic assoc. Publ., 1891, vol. 6, p. 473-583.

— — *Same, separate.*

Clement, Willard Kimball. 1892.

The use of *enim* in Plautus and Terence. Baltimore, The Lord Baltimore press, 1897, 16 p.

Clover, Alphonso Morton. 1904.

A study of the peroxides of organic acids. Easton, Pa., Chemical pub. co., 1904. 49 p.

Colby, June Rose. 1886.

Some ethical aspects of later Elizabethan tragedy. Ann Arbor, Mich., Author, 1886. iv., 38 p.

Cook, Webster. 1887.

The ethics of Bishop Butler and Immanuel Kant. Ann Arbor, Mich., Andrews, 1888. iv, 52 p. (University of Michigan. Philosophical papers. Second ser., no. 4.)

Cooper, Carl Herbert. 1901.

Distilling in Germany, with particular reference to its agricultural significance. [Ann Arbor, 1901.] 45 p.

De Barr, Edwin. 1899.

The rate of action of water on certain α , β -and- γ -halogen substituted fatty acids. *In Amer. chem. jour.* 1899, vol. 22, p. 333-350.

— — *Same, separate.*

Dennison, Walter. 1896.

The epigraphic sources of the writings of Gaius Suetonius Tranquillus. *In Amer. jour. of arch.* 2nd ser., 1898, vol. 2, p. 26-70.

— — *Same, separate.*

Dick, Samuel Medary. 1891.

The principle of synthetic unity in Berkeley and Kant. Lowell, Morning mail co. print. 1898. vii, 82 p.

Dixon, Frank Haigh. 1895.

State railroad control with a history of its development in Iowa. With an introduction by Henry C. Adams, Ph.D. New York, Crowell & co. [1896]. ix, 250 p.

Drake, Joseph Horace. 1900.

The principales of the early empire. *In Univ. of Mich. studies, Humanistic series.* 1904, vol. 1, p. 261-332.

Duvel, Joseph William Tell. 1902.

The vitality and germination of seeds. In U. S. Dept. of agri. Bull. of plant industry, no. 58, 1904, 96 p.

— — *Same, separate.*

Eastwood, John Foster. 1887.

Organic contamination of soils. In *The Sanitarian*. 1887, vol. 19, p. 151-158.

— — *Same, separate.*

Elden, Wallace Stedman. 1900.

The conditional period in the writings of Quintus Horatius Flaccus. Waterville, Me., Mail pub. co., 1900. 128 p.

Estes, Ludovic. 1888.

Latitude of the Detroit observatory, Ann Arbor, Mich., determined by the zenith telescope and discussed by the method of least squares. Ann Arbor, Register, 1888. 1 p. l., 54 p.

Gomberg, Moses. 1894.

On the action of some inorganic cyanides upon chloro-caffeine. In *Amer. chem. jour.* 1895, vol. 17, p. 403-420.

— — *Same, separate.*

Hadzsits, George Depue. 1902.

Prolegomena to a study of the ethical ideal of Plutarch and of the Greeks of the first century A. D. In *Univ. of Cincinnati. University studies.* March-April, 1906. ser. 2, vol. 2, no. 2. 66 p. 1l.

— — *Same, separate.*

Hamaoka, Itsuo. 1900.

A study on the Central bank of Japan, with introductory note by Henry Carter Adams. Tokyo, Tokyo Semmon Gakko, 1902. vii, 121 p.

Holmes, Mary Emili. 1888.

The morphology of the carinae upon the septa of rugose corals. Boston, Bradlee Whidden, 1887. 31 p. 16 pl.

Jackson, William Taylor. 1879.

Seneca and Kant; or, An exposition of stoic and rationalistic ethics, with a comparison and criticism of the two systems. Dayton, United Brethren pub. house, 1881. 109 p.

Johnson, Charles Willis. 1903.

The action of oxidizing agents, particularly potassium permanganate and iodic acid, upon morphine. *In Amer. pharmaceutical assoc. Proceedings*, 1903, p. 300-317.

— — *Same, separate.*

Johnston, John Black. 1899.

The brain of acipenser; a contribution to the morphology of the vertebrate brain. Jena, Gustav Fischer, 1901. 204 p.

Jones, Lewis Ralph. 1904.

The cytolytic enzyme produced by *Bacillus carotovorus* and certain other soft rot bacteria. *In Centralblatt f. bakteriologie, parasitenkunde u. infektionskrankheiten*, 1905, 2. abth., 14. bd., p. 257-272.

— — *Same, separate.*

Kies, Marietta. 1891.

The ethical principle and its application in state relations. Ann Arbor Register pub. co., 1892. [2], iii, v, 131 p.

Knight, George Wells. 1884.

History and management of land grants for education in the Northwest territory. New York, G. P. Putnam, 1885. 1 p. l., 175 p.

Kodama, Riotaro. 1898.

Railway transportation in Japan. Ann Arbor, Register, 1898. 1 p. l. [iii], 72 p.

Lange, Carl Friedrich August. 1903.

Maler Müllers jugendsprache. Ann Arbor, Mich., G. Wahr, 1904. xvi, 68 p.

Leach, Mary Frances. 1903.

On the chemistry of *Bacillus coli communis*. *In Jour. of biological chem.* 1906, vol. 1, p. 463-502.

— — *Same, separate.*

Lessing, Otto Edward. 1901.

Schillers einfluss auf Grillparzer: eine litterarhistorische studie. *In Bull. of Univ. of Wis. Phil. and lit. ser.* 1902, vol. 2, p. 77-204.

— — *Same, separate.*

Lowrey, Charles Emmet. 1884.

The philosophy of Ralph Cudworth. New York, Phillips & Hunt, 1884. 212 p.

McClintock, Charles Thomas. 1892.

Corrosive sublimate as a germicide. *In* Medical news, 1892, vol. 61, p. 365-370, 397-400.

— — *Same, separate.*

MacNeal, Ward J. 1904.

The life-history of *Trypanosoma Lewisi* and *Trypanosoma Brucci*. *In* Jour. of infectious dis. 1904, vol. 1, p. 517-543.

— — *Same, separate.*

Marshall, Charles Edward. 1902.

Aeration of milk. *In* Mich. state agri. coll. exp. sta. Dept. of bacteriology and hygiene, Special bull. 16. 1902. 58 p.

— — *Same, separate.*

Meador, Clarence Linton. 1900.

A study of the Latin pronouns "is" and "hic." Ann Arbor, Author, 1901. 2 p. l., 79 p.

Mensel, Ernst Heinrich. 1896.

Zu den langen flexions- und ableitungssilben im althochdeutschen. *In* Jour. of Germanic phil. 1902, vol. 4, p. 25-46.

— — *Same, separate.*

Miller, Aura Maud. 1902.

Varia on the text of Hamlet. Ann Arbor, Richmond & Backus co., printers, 1905. 68 p.

Murrill, Paul Ingold. 1899.

Halides and perhalides of the picolines. *In* Jour. of Amer. chem. soc. 1899, vol. 21, p. 828-854.

— — *Same, separate.*

Novy, Frederick George. 1890.

The toxic products of the bacillus of hog-cholera. *In* Medical news. 1890, vol. 57, p. 231-237.

— — *Same, separate.*

Ono, Yeijiro. 1889.

The industrial transition in Japan. *In* Publ. of Amer. economic assoc. 1890, vol. 5, p. 1-121.

— — *Same, separate.*

Pearl, Raymond. 1902.

The movements and reactions of fresh-water Planarians: a study in animal behaviour. *In* Quarterly jour. of microsc. sci. 1901, vol. 46, p. 509-714.

— — *Same, separate.*

Pollock, James Barkley. 1897.

The mechanism of root curvature. *In* Botanical gazette. 1900, vol. 29, p. 1-63.

— — *Same, separate.*

Pond, Raymond Haines. 1902.

The biological relation of aquatic plants to the substratum. *In* U. S. Rept. of Commr. of fish and fisheries. 1905, p. 485-526.

— — *Same, separate.*

Randall, Harrison McAllister. 1902.

On the coefficient of expansion of quartz. *In* Physical rev. 1905, vol. 20, p. 10-37.

— — *Same, separate.*

Roedder, Edwin Carl. 1898.

Wortlehre des adjectivs im altsächsischen. *In* Bull. of Univ. of Wis. Philol. and lit. ser. 1901, vol. 1, p. 335-415.

— — *Same, separate.*

Scholl, John William. 1905.

Friedrich Schlegel and Goethe, 1790-1802. A study in early German romanticism. *In* Publ. of Modern lang. assoc. of Amer. 1906, vol. 21, p. 40-192.

— — *Same, separate.*

Shepard, John F. 1906.

Organic changes and feeling. *In* Amer. jour. of psych. Oct., 1906, vol. 17, p. 522-584.

— — *Same, separate.*

Sherzer, Will Hittell. 1901.

Geological report on Monroe County, Mich. *In* Mich. geol. survey. 1900, vol. 7, pt. 1. x p., 1 l., 240 p. 17 pl.

Smalley, Harrison Standish. 1906.

Railroad rate control. New York, Macmillan, 1906. 147 p. (Publications of the Amer. economic assoc., 3rd ser., vol. 7, no. 2.)

Smith, Erwin F. 1889.

Experiments with fertilizers for the prevention and cure of peach yellows. *In* U. S. Dept. of agri. Div. of veg. pathology. Bull. no. 4. 1893. 197 p. 33 pl.

— — *Same, separate.*

Stuart, Duane Reed. 1901.

The attitude of Dio Cassius toward epigraphic sources. *In* Univ. of Mich. studies, Humanistic ser., 1904, vol. 1, p. 101-147.

Taylor, Fred Manville. 1888.

The right of the state to be. An attempt to determine the ultimate human prerogative on which government rests. Ann Arbor, Mich., 1891. 1 p. l., 109 p.

Tiffany, Orrin Edward. 1905.

The relations of the United States to the Canadian rebellion of 1837-1838. *In* Buffalo hist. soc. publ. 1905, vol. 8, p. 1-147.

— — *Same, separate.*

Townley, Sidney Dean. 1897.

Orbit of Psyche. San Francisco, C. A. Murdock & co., 1905. 12 p.

Transeau, Edgar Nelson. 1904.

The bogs and bog flora of the Huron River Valley. *In* Botanical gazette. 1905-06, vol. 40, p. 351-375; p. 418-448; vol. 41, p. 17-42.

— — *Same, separate.*

Travis, Ira Dudley. 1897.

The history of the Clayton-Bulwer treaty. *In* Pub. of the Mich. polit. sci. assoc. 1900, vol. 3, ix, 312 p.

— — *Same, separate.*

Woodruff, Eugene Cyrus. 1900.

A study of the effects of temperature upon a tuning fork. *In* Physical rev. 1903, vol. 16, p. 325-355.

— — *Same, separate.*

APPENDIX III.

List of Periodicals in the Library which are Indexed in Poole, the Annual Literary Index and the Readers' Guide.

NOTE.—A dash not followed by a number, indicates that the Library has the periodical up to date. A period after a volume number or date signifies the suspension of the periodical.

Academy (London).....	1-	1869-
Academy (Syracuse).....	1-7.	1886-92.
All the year round.....	1-76.	1859-95.
American (only v. 1-21 indexed).....	30-33.	1898-1901
Am. acad. pol. soc. sci. <i>See</i> Annals.		
Am. almanac	1-32.	1830-61.
Am. annual register.....	1-8.	1825-33.
Am. antiquarian. 1878- odd numbers.		
Am. anthropologist	1-	1888-
Am. architect	1-	1876-
Am. biblical repository 1-12; 2nd ser. 1-12; 3rd. ser. 1-6.		1831-50.
Am. bibliopolist (v. 9 incomplete).....	1-9.	1869-77.
Am. church review.....	21-44	1869-84
Am. economic association publications.....	1-	1886-
Am. geographical soc. Bulletin (and Journal)	1-	1852-
Am. historical record.....	1-3.	1872-4.
Am. historical register.....1-4; 2nd ser. 1.		1894-7.
Am. historical review.....	1-	1895-
Am. institute of instruction, 1, 3-8, 10, 12, 14-32, 34-42, 45-62, 64-72, 74-		1831-
(Poole indexes only v. 1-18, 1831-48)		
Am. journal of archæology.....	1-	1885-
Am. journal of education (Barnard's)....	1-31.	1855-81.
Am. journal of philology.....	1-	1880-
Am. journal of psychology.....	1-	1887-
Am. journal of science (Silliman's).....	1-	1818-
(Am.) J. of soc. sci. <i>See</i> J. of soc. sci. (Am.)		
Am. journal of sociology.....	1	1895-
Am. journal of theology.....	1-	1897-
Am. law review (Law library).....	1-	1866-
Am. methodist magazine.....	12-14, 18-22.	1830-40.
Am. naturalist	1-	1867-
Am. mo. rev. of rev. <i>See</i> Rev. of rev., N.Y.		
Am. presbyterian review.....	1-3, 5-20.	1852-71.
Am. quarterly register.....	1-15.	1827-43.
Am. quarterly review.....	1-22.	1827-37.
Am. review (Walsh's).....	1-4.	1811-2.
Am. statistical assoc. publications.....	1-	1888-
Am. whig review.....	1-16.	1845-52.
Andover review.....	1-19.	1884-93.
Annals of the Am. acad. pol. soc. sci.....	1-	1890-
Annual register (N.Y.). <i>See</i> Am. ann. reg.		
Anthropological (institute) journal.....	1-	1871-
Antiquarian mag. and bibliog. (Walford). 1-11		1882-6

Antiquary, new ser.....	1-	1880-
Appleton's journal.....	1-26.	1869-81.
Archæologia	1-	1770-
Arena	1-	1889-
Argosy	1-54	1865-
Around the world.....	1-2.	1893-5.
Art journal.....	1-34, 37-46	1849-82, 85-94
Astronomy and astro-physics.....	11-13.	1892-4.
Astrophysical journal.....	1-	1895-
Athenæum (no vol. nos.; refer by year)..	(1-)	1828-
Atlantic monthly.....	1-	1857-
Bachelor of arts.....	1-3	1895-6
Bankers' magazine (London).....	1-49	1844-79
Bankers' magazine (N. Y.).....	18-	1864-
Baptist quarterly.....	1-11.	1867-77.
Bay state monthly.....	1-3.	1884-5.
Bentley's miscellany.....	1-64.	1837-68.
Biblical world.....	3-	1894-
Bibliographer (London).....	1-6.	1881-4.
Bibliographica	1-3.	1895-7.
Bibliotheca sacra.....	1-	1844-
Blackwood's magazine.....	1-	1817-
Book buyer (N. Y.), 2nd ser.....	1-2	1884-5
Book news.....	12-	1894-
Book reviews.....	1-9.	1893-1901.
Bookman (N. Y.).....	1-	1895-
Bookworm	1-7.	1887-94.
British almanac companion.....	1-	1828- except 1868 and 1896
British and foreign review.....	1-18	1835-44
British quarterly review.....	53-83.	1871-86.
Brownson's quarterly review.....	11-15	1854-8
California university chronicle.....	1-	1898-
Canadian journal of industry, sci. and art..	1-10	1856-65
Cassier's magazine.....	1-	1891-
Catholic world.....	1-41, 48-62	1865-
Century.....new ser. 1- whole ser.	23-	1881-
Chambers' journal.....2nd ser.	1-68	1844-91
Charities	6-	1901-
Charities review.....	1-10.	1891-1901.
Chautauquan	4-	1884-
Christian disciple.....2nd ser.	1	1819
Christian examiner.....	1-87.	1824-69.
Christian union.....	37, 39-47.	1888-93.
Church review. <i>See</i> Am. ch. rev.....	41-44	1883-4
Citizen	1-3	1896-8
Colburn's magazine.....2nd ser.	1-84, 97-147	1821-70
Congregational review.....	8-11.	1868-71.
Conservative review.....	1-5.	1899-1901.
Contemporary review.....	1-	1866-
Continental monthly.....	1-6.	1862-4.
Cornhill magazine.....	1-	1860-
Cosmopolitan.....4, 5, 7-24, 26, 27.	29-	1887-
Country life in America.....	1-	1901-

Craftsman	1-	1901-
Critic (after Sept., 1906, contin. in Putnam's monthly).....	1-49.	1881-1906.
Critical review. Some early nos. and.....	10-	1900-
Current literature.....	32-	1902-
De Bow's review.....	I, 2, 4-30. n. s.	1-6 1846-61. 1866-9
Democratic review.....	1-42	1837-58
Dial (Boston).....	1-4.	1840-4.
Dial (Chicago).....	1-	1880-
Dublin review.....	1-	1836-
Dublin university magazine.....	1-81	1833-73
Eclectic engineering mag. (Van Nostrand's)	1-35.	1869-86.
Eclectic magazine.....	2, 3, 5, 6, 22-33. 55-113, 134, 135	1844-1900
Economic journal.....	1-14	1891-1904
Economic review.....	1-7	1891-7
Economic studies.....	1-4.	1896-9.
Edinburgh philosophical journal.....	1-10	1819-24
Edinburgh review.....	1-	1802-
Education	1-	1880-
Educational review.....	1-	1891-
Engineering magazine.....	1-	1891-
English historical review.....	1-	1886-
English illustrated magazine.....	1-	1883-
Ethical record.....	1-3.	1888-90.
Everybody's magazine.....	1-	1899-
Folk-lore soc. (Record and Journal).....	1-	1878-
Foreign quarterly review.....	1-37.	1827-46.
Foreign review.....	1-5.	1828-30.
Forestry	5, 7, 8	1881-4
Fortnightly review.....	1-	1865-
Forum	1-	1886-
Foster's monthly reference lists.....	1-4.	1881-3.
Franklin institute, journal.....	1-	1826-
Fraser's magazine.....	1-106.	1830-82.
Galaxy	1-25.	1866-78.
General repository.....	1-4.	1813-4.
Gentleman's magazine (1-1731-)....	Poole: 1-	1868-99
Geographical journal.....	1-	1893-
Green bag (Law library).....	1-	1889-
Gunton's magazine.....		(scattering nos.)
Harper's magazine.....	1-	1850-
Harper's weekly.....	5, 6, 8, 9, 11, 19-30, 37-	1861-
Harvard graduates' magazine.....	1-	1892-
Harvard monthly.....	(v. 3 and misc. nos.)	1902-
Hibbert journal.....	1-	1857-75.
Historical magazine (Dawson's).....	1-23.	1865-70.
Hours at home.....	1-11.	1850-9.
Household words.....	1-19.	1839-70.
Hunt's merchants' magazine.....	1-63.	

Illustrated London news.....	1-	1842-
Independent	55-	1903-
International journal of ethics.....	1-	1890-
International magazine.....	1-5.	1850-2.
International monthly, and quarterly.....	1-	1900-
International review.....	1-14.	1874-83.
International studio, N. Y., as indexed in Poole: 1-		1897-
Corresponds to Studio, Lond., v. 10-date, with American additions.		
Jewish quarterly review.....	1-	1889-
Johns Hopkins university studies.....	1-	1882-
Journal of American folk-lore.....	1-6	1888-93
Journal of biblical literature.....	1-	1881-
Journal of Hellenic studies.....	1-	1880-
Journal of political economy.....	1-	1892-
Journal of social science (Am.).....	1-	1869-
Journal of speculative philosophy.....	1-22.	1867-93.
Journal of the Anthropol. institute. See Anthropol. institute.		
Journal of the Franklin institute. See Franklin institute.		
Journal of the Society of arts. See Society of arts.		
Journal of the statistical society. See Royal statistical society.		
Juridical review. (Law library).....	1-	1889-
Knickerbocker, or N. Y. magazine.	2, 6-58. 66.	1833-65.
Land we love.....	1, 2	1866
Law quarterly review. (Law library)....	1-	1885-
Library	1-10, n. s.	1889-
Library journal.....	1-	1876-
Lippincott's magazine.....	1-	1868-
Literary and theological review.....	1-6.	1834-9.
Literary world (Boston).....	4-35.	1873-1904.
(Littell's) Living age.....	1-	1844-
London magazine.....	1-23.	1820-9.
Longman's magazine.....	1-46.	1882-1905.
McClure's magazine.....	1-	1893-
Macmillan's magazine.....	1-	1859-
Magazine of American history.....	1-30.	1877-93.
Magazine of Christian literature.....	1-5	1889-
Magazine of western history.....	1-12	1884-90
Manchester quarterly.....	1-19	1882-1900
in Manchester literary club papers.....	8-26	
Poole indexes	1-3	1882-4
Manhattan	1-4.	1883-4.
Massachusetts quarterly review.....	1-3.	1847-50.
Masters in art.....	1-	1900-
Mathematical monthly.....	1-3.	1858-61.
Methodist quarterly, and Meth. review....	1, 2, 6-	1841-

Mind	1-	1876-
Missionary review.....ser. I. 5; II.	1-13	1882, 1888-1900
Monist	1-	1890-
Month	93-94	1899
Monthly religious magazine.....21 22,	45-51.	1844-74.
Monthly review (London).....	1-81	1749-89
2nd ser., 3-13, 15-42, 46-48,	46-48, 50-75	1790-1814
Poole indexes Mo. R., beginning v. 82,		
1790, to v. 165, 1844. (v. 43-45, 1845,		
not indexed.)		
Monthly review (London).....	1-	1900-
Municipal affairs.....	1-	1897-
Munsey's magazine.....	10-	1893-
Murray's magazine.....	1-10.	1887-91.
Music	1-22.	1891-1902.
Nation	1-	1865-
National geographic magazine.....	1-	1888-
National magazine (Poole: Nat'l M., Bost.)	18-20	1903-4
National magazine, N.Y. (Poole: Nat. M.).	1-13.	1852-8.
National review (Poole: National).....	25-28	1895-7
Nature	1-	1869-
New England histor. and gen. register....	1-	1847-
New England magazine, new ser.....	1-	1889-
New Englander	1-56.	1843-92.
New monthly mag. <i>See</i> Colburn's.		
New Princeton review.....	1-6.	1886-8.
New review	1-17.	1889-97.
New world	2	1893
New York review.....	1-10.	1837-42.
Niles' weekly register.....	1-76.	1811-49.
Nineteenth century.....	1-	1877-
North American review.....	1-	1815-
North British review.....	1-53.	1844-71.
Old and new.....	1-8	1870-3
Olden time (Craig).....	1-2.	1876.
Open court	1-	1887-
Our day.....	1-4	1888-9
Out west.....	23-24	1905
Outing	13-	1888-
Outlook	48-	1893-
Overland monthly.....ser. I. 1, 2; ser. II.	13-26	1868-95
Oxford prize essays.....	1-5.	1830-6.
Pall mall magazine.....	1-	1893-
Pamphleteer	1-29.	1813-28.
Pedagogical seminary.....	1-	1891-
Penn monthly (v. 13-14 not indexed)....	1-12	1870-81
Pennsylvania magazine.....	1-	1877-
Philosophical review.....	1-	1892-
Pioneer	1	1854
Poet-lore	1-	1889-
Political science quarterly.....	1-	1886-
Popular astronomy	1-	1893-

Popular science monthly (Appleton).	1-	1872-
<i>See also</i> Supp. pop. sci. mon.		
Popular science review, 2nd ser.....	16-20.	1877-81.
Portfolio (Hamerton's).....	1-24	1870-93
Potter's Am. monthly.....	4-9	1875-7
Presbyterian quarterly review.....	1-6.	1872-7.
Presbyterian review	2-9	1881-8
Princeton review, 2nd ser. 2, 11, 12, 18-21,	30, 34-38	1830-66
Princeton review, new ser.....	1-14.	1878-84.
Psychological review.....	1-	1894-
Public libraries.....	1-	1896-
Public opinion.....	7-41.	1889-1906.
Putnam's magazine.....	1-16.	1853-7, 1868-70.
Putnam's monthly and the Critic.....	1-	1906-
Quarterly journal of economics.....	1-	1886-
Quarterly review.....	1-	1809-
Vols. 61-156, Am. edition, pages do not agree with references in Poole.		
Radical (misc. numbers).		1865-72.
Reader magazine.....	4	1904
Retrospective review.....	1-18.	1820-8, 1853-4.
Review of reviews (N. Y.).....	1-	1890-
Royal historical society, Transactions.....	1-	1872-
Royal statistical society, Journal.....	1-	1838-
St. Paul's magazine.....	1-14.	1867-74.
Saturday review.....	1-	1855-
School and college.....	1.	1892.
School review.....	1-	1893-
Science	1-23.	1883-94.
Science, n. s.....	1-	1895-
Science progress.....	1-7.	1894-8.
Scientific American...ser. I. 3-14; ser. II.	1-	1846-
Scientific American supplement.....	1-	1876-
Scottish review.....	1-36.	1882-1900.
Scribner's magazine.....	1-	1887-
Scribner's monthly.....	1-22.	1870-81.
Selections from the Edinburgh review....	1-6.	1835-6.
Sewanee review.....	1-	1892-
Sidereal messenger.....	2-10.	1883-91.
Society of Arts, Journal.....	1-	1852-
South Atlantic quarterly.....	1-	1902-
Southern historical society papers.....	1-6	1876-8
Sparks' library of Am. biography.....	1-25.	1839-48.
Spectator	10-	1837-
Spirit of the pilgrims.....	1-6.	1828-33.
Strand magazine.....	1-	1891-
Studio (London). <i>See</i> International studio	1-	1893-
Subjects of the day.....	1	1890
Supplement to Pop. sci. mon.....	1-4.	1876-9.
Technology review.....	1-	1899-
Temple Bar.....	1-	1860-
Theatre, ser. I, 3 v., 1877-8, not in Poole.		
1878-82, by half years, and v.	18-	1887-

Unitarian review.....	1-36.	1874-91.
United service.....ser. I, 6-9; ser. II, 3-12		1882-94
U. S. service magazine.....	1, 2	1864
Universal review.....	1-7	1888-90
Univ. of Pa. publications in polit. econ....	1-12.	1886-93.
University quarterly.....	4.	1861.
Van Nostrand's ecl. engin. mag.		
<i>See Eclectic.</i>		
Walford's antiq. and bibliog.		
<i>See Antiquarian.</i>		
Walsh's American review. <i>See "Am. rev."</i>		
Western	5, 6	1879-80
Westminster review.....	1-	1824-
World's work.....	1-	1900-
Yale review.....	1-	1892-

Opinions of Prominent Educators as to the Relations of the Library to the University.

"A few months ago, a philanthropist asked a certain university president of my acquaintance, wherein he might best expend three-quarters of a million dollars which it was his purpose to present to the institution. The answer came, quick as thought, that the erection of a library building was by all means the greatest and most immediate service that he could render; and plans are now under way for a structure which shall worthily house that university's records of the past.

"The library is today generally recognized by thoughtful men as the storehouse of accumulated knowledge, the laboratory of the humanities, the nerve-centre of the college. Such was the thought which induced President Low to place his magnificent library in the center of the fine group of buildings which house Columbia University—the largest and the most artistic of them all. Princeton and Cornell, in constructing their new library buildings, exhibited the same wise appreciation. Yale is gradually evolving a structure which shall eventually take rank over all its architectural colleagues; and Harvard is but awaiting a generous giver, before making her library the dominant feature of her campus. Such is the note heard upon every hand in our own country; while abroad, one often finds the library building the central factor at seats of learning. The college library must be centrally located, in order that it may be convenient to every department; it must be lacking in no mechanical device which may facilitate the use of its treasures; while its commanding importance in the work of education, and its dignity as the repository of the records of human experience and achievement, alike demand that its architecture be artistic and if possible impressive."—R. G. Thwaites, at the dedication of Beloit College Library, January, 1905.

"The library of a university is its very heart. If the heart is weak, every organ suffers; if strong, all are invigorated. Its impulses send nourishment to every nerve, sinew and muscle. True it is that stone and wood, however ornamental, do not make a library,—nor does a heap of books, hoarded by an antiquary in some dark loft, ill-arranged, inaccessible and laden with dust. Choice materials well administered in a fitting hall, are the two essentials."—President D. C. Gilman, at the dedication of the new library building for Princeton University.

"The modern university library is indeed everybody's workshop. To add metaphors without confusion, it is the laboratory of laboratories; it is the university's great alembic, it is an enlarged and expanded faculty, it is the blessed company of the Immortals, it is the *n*th power of a university training, it is the true Pierian spring. Perhaps the most adequate description will be found in the assertion that it is the heart of the university."—Dr. James H. Canfield, in the "Columbia University Quarterly," June, 1904.

"The university represents a unique combination of the library and the scholar. A library without a scholar is a pile of bricks without an architect, useless, meaningless; a scholar without a library is an architect without bricks, helpless, worthless. A scholar in the library, a library for a scholar, and both constituent parts of the university, represent the affluence, the power, and the progress of learning."—President Charles F. Thwing, in his "College administration," 1900, p. 191.

"Books may be accumulated and guarded, and the result is sometimes called a library: but if books are made to help and spur men on in their own daily work, the library becomes a vital influence; the prison is turned into a workshop."—Justin Winsor, Annual Report of the Harvard College Library, 1876-77.

"The popularity of a university once depended wholly upon the professional reputation of its instructors. Now the leading questions relate to the size, character and value of its library. The presence of a large body of post-graduate students is an inspiring feature of university life, and to the public a guaranty of the high scholarship and superior educational advantages of the institution. These students cannot be secured and retained unless they have access to a large and well-furnished library."—W. F. Poole, Phi Beta Kappa address, Northwestern University, 1893.

THE UNIVERSITY BULLETIN IS ISSUED BY THE UNIVERSITY OF MICHIGAN AS OFTEN AS ONCE A MONTH DURING THE UNIVERSITY YEAR.

ENTERED AS SECOND-CLASS MATTER AT THE POSTOFFICE AT ANN ARBOR, MICHIGAN.

THE BULLETIN INCLUDES THE FOLLOWING PUBLICATIONS:—

The Annual Report of the President.

The Calendar of the University.

The Annual Announcements of the Department of Literature, Science, and the Arts, the Graduate School, the Departments of Engineering, of Medicine and Surgery, and of Law, the School of Pharmacy, the Homœopathic Medical College, the College of Dental Surgery, and the Summer Session.

Other Announcements of the several departments of instruction, Reports of University Officers, etc.